



# introduction to design equity



# Introduction to Design Equity

# Introduction to Design Equity

*KRISTINE MILLER, PH.D.*

UNIVERSITY OF MINNESOTA LIBRARIES PUBLISHING  
MINNEAPOLIS



*Introduction to Design Equity by Kristine Miller is licensed under a [Creative Commons Attribution 4.0 International License](https://creativecommons.org/licenses/by/4.0/), except where otherwise noted.*



This book was produced using Pressbooks.com, and PDF rendering was done by PrinceXML.



# Contents

<a href="#">Acknowledgements and Dedication</a>	vi
<a href="#">Chapter 1 - Introduction</a>	1
<a href="#">Chapter 2: Learning to Talk about Racism</a>	8
<a href="#">Chapter 3: Why History Matters to Design Equity</a>	12
<a href="#">Chapter 4 - Health Equity and the Built Environment</a>	15
<a href="#">Chapter 5 - Transportation Equity</a>	23
<a href="#">Chapter 6 - Information Equity</a>	32
<a href="#">Chapter 7 - What is Design Thinking and What does it have to do with Equity?</a>	40
<a href="#">Chapter 8 - Discipline-Specific Professional Design Processes and Equity</a>	53

# Acknowledgements and Dedication

## Acknowledgements

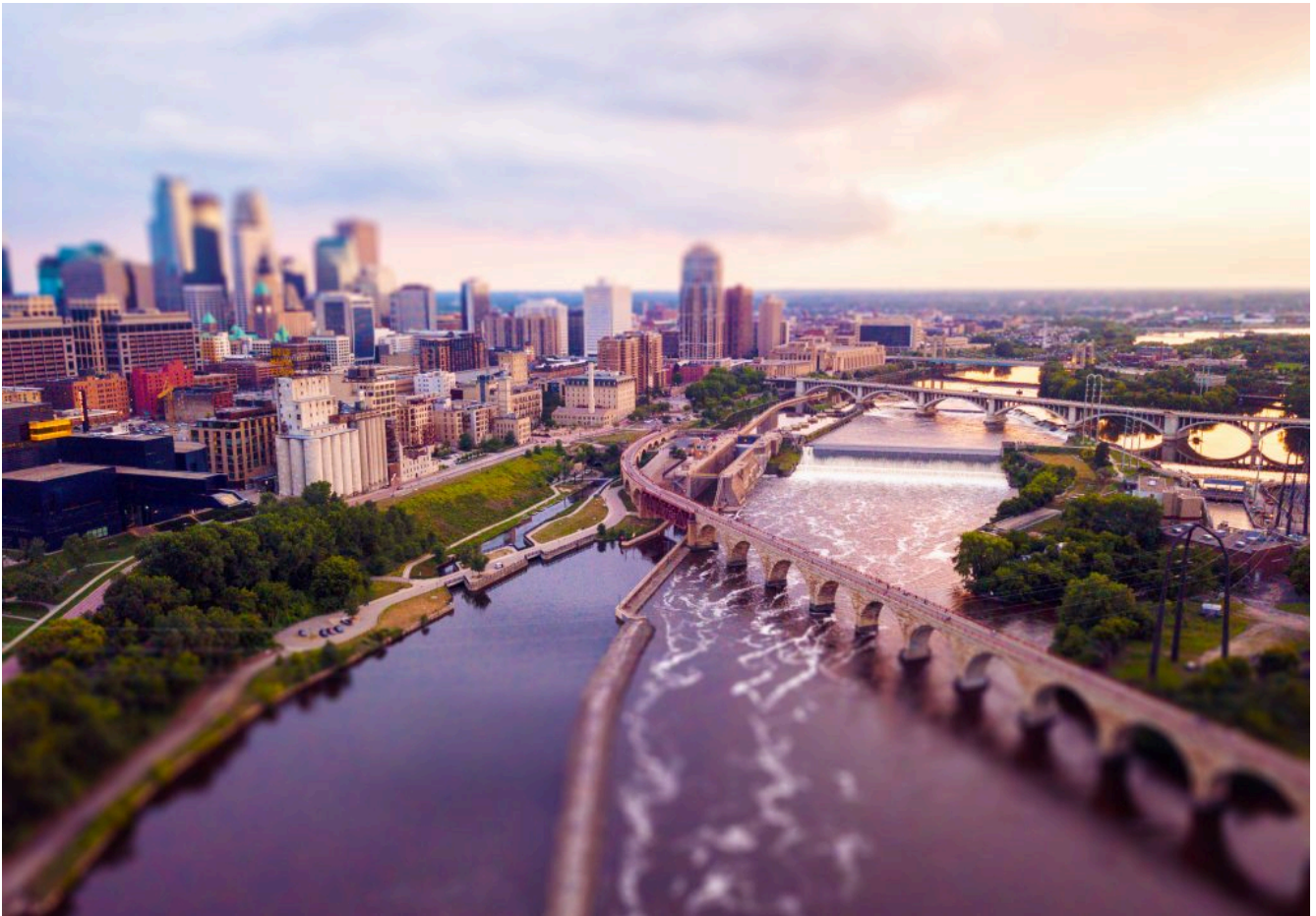
The cover image shows buttons designed by [Juxtaposition Arts](#) teaching artists and apprentices.

Many people helped create this resource. Thanks to Kristi Jensen, who guided and encouraged me through the entire process of open source online publishing and put lots (and lots) of time and energy into the final product. Thanks to friends and colleagues who provided feedback, support, and editing, including: Valentine Cadieux, Carrie Christensen, DeAnna Cummings, Roger Cummings, Vince deBritto, Diane Brown, Diane Dodge, Adrienne Doyle, Gail Dubrow, Joe Favour, Tom Fisher, Cindy Garcia, Tia Simone Gardner, Melvin Giles, Pat Hemmis, Clint Hewitt, Kate Hopper, Janaya Martin, Neeraj Mehta, Kathy Mouachepao, Kristen Murray, Megan Phinney, Lynda Schneekloth, Roozbeh Shirazi, Robert Shibley, Amanda Smoot, Billy Weber, and Craig Wilkins. Thanks to the Department of Landscape Architecture, College of Design, University of Minnesota; the University of Minnesota Libraries; and the Bush Foundation for their support of the project at different times in its development. And thanks to research assistants Ali Boese, Leslie Johnson, Rachel McNamara, Haily Schmitz, and Linda Spohr.

## Dedication

This book is dedicated to the memory of [Kris Nelson](#) who helped found [ReMix](#) in 2005 and is deeply missed. [Kris's and DeAnna Cummings's 2011 article on art, design, and equity](#) has been a touchstone for many of the chapters.

# Chapter 1 - Introduction



*View of downtown Minneapolis and the Mississippi River*  
Photo by [Nicole Harrington](#)

San Francisco, Portland, Austin, Madison, and Minneapolis are considered some of the country's best-designed and most politically liberal cities. Mention of each brings to mind public parks, ample bike lanes, eclectic music scenes, colleges, creatives, and craft beer. Each has focused public funds on livability investments like transit, public spaces, arts, and entertainment. Each has said that equity—fair and just access to opportunities and resources for all of its citizens—is a central concern of its place and policy-making. But as David Dahmer asks in his article titled “The Harsh Truth about Progressive Cities,” (Dahmer, 2015) why are these cities some of the most unjust in the U.S.?

My own hometowns of Minneapolis and St. Paul have, in the last ten years, topped the charts for livable neighborhoods and beautiful parks. A 2015 article in *The*

*Atlantic*, titled “The Miracle of Minneapolis,” said that “No other place mixes affordability, opportunity, and wealth so well” (Thompson, 2015). But what the article did not point out—though many readers immediately did—is that, livability awards aside, and official rhetoric about the importance of equity aside, the Twin Cities is still one of the worst places in the country to be Black or Native American. That’s right, one of the worst. And this is on important measures like education, health, and jobs.

This comes as a big surprise to many white Minnesotans. We are used to looking at statistics in aggregate, not separated by race or ethnicity. In aggregate, we look pretty good. So we pat ourselves on the back and assume that those aggregated statistics hold for all Minnesotans. We assume we are good people with good leaders. We assume “those problems” don’t plague Northern cities. Cities where NPR is well funded and politicians, at least until you hit the suburbs, are mainly left of center.

So why do such affluent and liberal cities have some of the biggest racial disparities in the country? And why do other left-leaning cities like San Francisco, Portland, Austin, and Madison sit right there at the bottom with us?<sup>1</sup>

## **Why doesn’t “good” design and planning mean better lives for everyone?**

Why doesn’t “good” design and planning mean better lives for everyone? We know the built environment has a huge impact on health, mobility, jobs, safety, and social networks—but why are these impacts so unevenly felt across a city?

These questions aren’t new, not even in the design fields. They are, however, receiving renewed attention in several public interest design programs across the country where students, faculty, and practitioners are teaming up to address the gap between our professional pledge to serve “the public good” and the reality that the public we have been serving best is mainly white and often affluent. These programs are partnering with non-profits and municipalities to build community gardens, rethink transit systems, and advocate for better and more affordable housing. Not all of these programs are new. Many, in fact, can trace their roots back to the 1970s, as designers tried to chart their paths within larger social justice movements.

## **What should we advocate**

Although it’s exciting to me that the pendulum towards socially responsible design education and practice has

1. See “The Harsh Truth about Progressive Cities” at <https://madison365.com/what-no-one-wants-to-talk-about-race-and-progressive-cities/>.

**for? What skills do  
designers need to have?  
What do they need to  
know?**

swung back, I worry that unless we start to have some difficult conversations with each other and with our students, decision makers, and clients, this resurgence will fall flat and, in the process, do more harm than good. The pendulum will swing again and sheafs

of well-intended designs will gather dust in flat files, reports, and hard drives. Instead of having transit that connects people to jobs and home, parks and public spaces that are well maintained and active, and housing that is affordable and safe and beautiful, we will be left to explain why nothing tangible came of the design process. How do we make sure this doesn't happen? What should we advocate for? What skills do designers need to have? What do they need to know?

This book, originally created for a Public Interest Design (PID) course at the University of Minnesota called Design Equity, was written with the hope that it will become a resource for professional designers, non-profit and government partners, and community members. In conversations about how we want to ground the entire PID program, the word *equity* became a way to wrestle with what we mean by public interest. Equity means fair and just access to opportunities and resources and, in our minds, should be a fundamental goal of all public interest design projects and programs.

In the past few years, unfortunately, the term equity has become ubiquitous and its definition murky. It seems like every government report or new foundation initiative has incorporated the word into its title. In "Is Equity the New Coconut Water?" Vu Le comments on the term's overuse in Seattle: You can't walk down the street without hearing someone saying something like, "Equity. Equity, equity, equity. Blah blah community engagement Seahawks equity" (Vu, 2014).

If the term has lost its intended meaning, should we, as Vu Le asks, put it back on the grocery store shelf next to the kombucha? Does it still have value to designers working for social justice? I think we need to keep it (or take it back, depending on your view). It's prevalence presents ample opportunities to spark conversations about its real meaning. Each time the word is spoken—in a public meeting or behind closed doors, in a foundation report or a design proposal—there is an opening, a moment when an important and difficult conversation about systemic racial disparities could occur.

There is value in the specific and surprising turn of phrase required in defining equity. We see the word *equity* and think *equal*—everyone receiving the same amount of benefits or

**But equity does not mean  
equal because the playing  
field is not level. We don't**

suffering the same risks related to any new policy or project. That seems fair. But equity does not mean equal, because the playing field is not level. We don't start from a point of equality.

## **start from a point of equality.**

Throughout our history and up to today, unfair policies have privileged certain groups of people over others. Privilege exists when one group has something of value that others do not because of the groups they belong to, not because of what they have done or failed to do.

This disjuncture between equity as equal and equity as fair can fuel the conversations needed to make San Francisco, Portland, Austin, Madison, and Minneapolis/St. Paul into places where everyone has the chance to flourish—conversations that acknowledge and examine the history of this privilege and its specific impact on people in each city.

Equity is an ethical principle, a position on what is good and right. It can be defined as “fair and just access for all,” and refers to the fair distribution of impacts—both benefits and costs. To quote Braveman and Gruskin, two health equity researchers:

...equity...is the absence of systematic disparities...between groups with different levels of underlying social advantage/disadvantage—that is, wealth, power, or prestige. Inequities...put groups of people who are already socially disadvantaged (for example, by virtue of being poor, female, and/or members of a disenfranchised racial, ethnic, or religious group) at further disadvantage.... (Braveman & Gruskin, 2003, p. 254)

Equity does not mean numerically equal. It does not mean, for example, that the same amount of transit should be available to all people. Why? For low income families, who spend 45% of their income on transportation, a change in routes or schedules can mean less time at home, and missing the bus because of inconsistent scheduling can mean losing a job. For these families, the costs and risks are higher than they are for me. I have direct access to two cars, know lots of people with access to cars who could help in a pinch, and won't get fired if I'm late for work.

Another reason to take hold of the word *equity* is that if we don't clearly define and deploy the word, it will be usurped by those with the most power—usually those with the least interest in making better outcomes for people who historically and presently have the most at stake. It's not just professionals or government officials who say “equity” but mean equal; it's also community members involved in public participation processes. Depending on your implicit definition of equity,

you are going to argue for very different design and planning approaches.<sup>2</sup> Ones that either benefit everyone or benefit a few.

**...we tend to define environmental design by its end products, not its processes.**

One challenge to creating equity-driven design strategies is that we tend to define environmental design by its end products, not its processes. We see parks, streets, sidewalks, plazas, housing, neighborhoods, and transit systems. We don't see who had a say in the decisions,


where the money came from, and which people the project does or doesn't benefit. We can, however, train ourselves to see these "hidden" outcomes in the present by looking at examples from the past. Environmental design history can also show us how we got into this inequitable state.

In the next chapter we will examine decades of design decisions that helped create today's uneven playing field. The history of environmental design shows us how the physical qualities we see in our cities, combined with what we don't see—the laws, policies, and processes—have allowed disparities to grow.

Why do these disparities persist? Why is it so hard to achieve equity? I think one of the biggest challenges of creating equitable cities is that we are afraid to talk about personal and institutional racism. If we can't talk about racism, we can't talk about equity. By focusing on racial equity I don't mean to ignore or downplay issues of gender, disability, or age. Instead I strive to get at the issues that have led to such shameful statistics in my own and many other U.S. communities. In Chapter 3 we will look at how personal and institutional racism work, why these discussions are so difficult, and how we can learn to get over our fears and engage in effective conversations.

**...one of the biggest challenges of creating equitable cities is that we are afraid to talk about institutional and personal racism.**


Next we will dig into some of the equity fields that are most related to

2. For instance, researchers studying post-Katrina planning efforts found that some residents advocated for equity as a way of acknowledging and addressing ongoing patterns of discrimination which "left different groups of people with much less." Others advocated for equity as equal and supported projects and policies that did nothing to address fundamental historic disparities. (Brand 2015), 249. <http://login.ezproxy.lib.umn.edu/login?url=http://jpe.sagepub.com/content/35/3/249.full.pdf+html> 

environmental design, like health, information, and transportation. How is equity understood in these fields? How does each field relate to environmental design products and processes? What solutions have been developed in these fields to bring us to equity? Is there a role for designers in their work?

Finally, we will bring our conversation back to design practice. How, given all that we have learned about equity, can environmental design help create equitable cities? Where are leverage points for generating more equitable outcomes? What is possible? What are the pitfalls? How does equity-driven design work differ from traditional design practice? How do we pay for it? How do we evaluate it? And most importantly, how do we sustain it over the long haul? Our cities didn't become inequitable overnight. Remaking them as places of opportunity for everyone is going to be a long haul.

## Additional Resources

- Angela Glover Blackwell, CEO of PolicyLink, a national non-profit that shares information and success stories about creating equitable communities, defines equity and presents an “Equity Manifesto.” Available at <http://putnam-consulting.com/philanthropy-411-blog/equity-is/>
- “What is the difference between equity and equality?” A reading and quiz developed by women’s health researchers. Available at <http://sgba-resource.ca/en/concepts/equity/distinguish-between-equity-and-equality/>
- Angela Glover Blackwell on the benefits of equity. Available at <https://www.youtube.com/watch?v=BUmTjSj9TBo>
- Rising to the Challenge: Define Equity: A description of health equity showing that people within the same social group may require different kinds of assistance to lead healthy lives. Available at <http://sgba-resource.ca/en/concepts/equity/define-equity/>
- Brand, Anna Livia. The politics of defining and building equity in the twenty-first century. (2015). *Journal of Planning Education and Research*, (3), 249–264. A peer-reviewed journal article that shows how varying definitions of equity among community members lead to different community planning goals. Available at <http://jpe.sagepub.com/content/35/3/249.full.pdf+html> 

## Works Cited

Braveman, P. & Gruskin, S. (2003). Defining equity in health. *Journal of Epidemiology and Community Health*, 57(4), 254–258. Available at <https://doi.org/10.1136/jech.57.4.254>

Dahmer, David. (2015, September 3). The harsh truth about progressive cities. Retrieved November 11, 2018 from <https://madison365.com/what-no-one-wants-to-talk-about-race-and-progressive-cities/>

Le, Vu. (2014, September 8). Is equity the new coconut water? Retrieved November 11, 2018, from <http://nonprofitaf.com/2014/09/is-equity-the-new-coconut-water/>

Thompson, Derek. (2015). The miracle of Minneapolis. *The Atlantic* (2), 30–32. Available at <https://www.theatlantic.com/magazine/archive/2015/03/the-miracle-of-minneapolis/384975/>

## Endnotes

# Chapter 2: Learning to Talk about Racism



*Design Equity Class with community leader and educator Melvin Giles at the Aurora St. Anthony Peace Garden in St. Paul. 2015*

During the second week of the Design Equity class we begin to learn how to talk about racism. I remember the night before the “racism talk” the first time I taught this class, four years ago; I was a nervous wreck. The session came early in the semester, before I knew all of the students, before they really knew me or each other. How would the session go? I was lucky to have two friend-colleagues, Melvin Giles and Megan Phinney, two of the co-founders of the Urban Farm and Garden

Alliance in St. Paul, MN,<sup>1</sup> leading our conversation; I knew they would be respectful and supportive of the students. In addition to being two of the kindest people I know, they are experts in leading these conversations. So why couldn't I fall asleep? Where was all of this fear coming from?

Melvin and Megan anticipate that most people feel fearful when faced with a conversation about racism in a group of people they don't know very well. So after introducing themselves, they begin by passing around small slips of paper and asking everyone to write down something they find scary or difficult in talking about racism. They then gather and redistribute the slips so that each person reads aloud someone else's fear. We learn that for some, fear of talking about racism is fear of being judged, of saying the wrong thing, of being labeled a racist. For others, it is fear of being pitied or misunderstood or viewed as angry. For some, it is all of the above. Some students share memories of painful conversations about racism with friends or family members that went really wrong really fast. And some sincerely believe that they "don't see race," so why bother?

The fact that there are so many different reasons why talking about racism stresses us out tells us two very important things about how racism persists and why conversations about race can fall apart. First, we have all had very different experiences in our lives, and if we haven't experienced something like racism it's hard to understand how pervasive it is. Our individual ways of seeing the world are so much a part of who we are that they remain mostly unconscious, but they underlie our responses to everyone and every idea we encounter.

Second, the fear of being labeled as a bad person and the defensiveness that can result from this fear can keep us from having meaningful discussions. Language around racism is confusing, so it's no wonder this fear is so strong. Jay Smooth says:

...anytime we're dealing with race issues, we are dealing with a social construct that was not born out of any science or reason or logic, we are grappling with a social construct that was not designed to make sense....It's a dance partner that's designed to trip us up. (Smooth, 2011)

There are a lot of words and ideas and concepts tied to the social construct of race, and some seem to conflict with one another. For example, how does racism exist when race does not? We use the term *racism* to talk about how people are judged on the basis of their appearance and culture, while at the same time we know that skin color and culture do not define separate human races. We know it now, but for a long time people in power promoted the idea that there were separate races, using it as justification for certain groups to be treated unfairly.

1. See The Urban Farm and Garden Alliance website at <http://urbanfarmandgardenalliance.org/>

Should we choose our words thoughtfully? Of course. Should we let fear of saying the wrong thing prevent us from having really important conversations? No. The Jay Smooth video does a great job of suggesting ways to handle the fact that, when it

**...when it comes to conversations about race, we are going to make mistakes.**

comes to conversations about race, we are going to make mistakes. I think about his “dental analogy,” (where he wonders why people can’t accept being told that something they said sounded racist, with the same openness that people accept being told that they have food in their teeth) a lot when I feel apprehensive upon discovering yet another pocket of racism in my own thinking or actions. Instead of letting defensiveness take over, I try to see my mistakes as opportunities to expand my understanding of the world beyond my personal experiences.

An interview with Beverly Daniel Tatum, clinical psychologist, professor, and President of Spelman College, digs further into how racism persists and is experienced by people day-to-day.<sup>2</sup> Tatum points out many common situations that can impact people in very different ways, depending on their skin color, and that can strengthen particular views of how the world works. As much as I think about racism, her interview showed me many situations I had never thought about, because I’d never needed to; it is truly eye-opening.

Physician and epidemiologist Dr. Camara Jones further explains the persistence of racism by showing how it operates at different levels. In her video,<sup>3</sup> Dr. Jones uses a gardening allegory to describe personally mediated, internalized, and institutionalized racism, and how these different types work together. Her clarification of abstract terms using vivid imagery can help us grapple with a tangled social construct.

With the help of Melvin and Megan and of resources like these, what used to be the most stressful class session has become one of my favorites, one in which I feel that we start to gel as a group of people trying to figure things out together. It makes me feel like a student, because there is a lot about my own world view and my own assumptions and biases that I haven’t yet uncovered or questioned. And it makes me feel that I’m starting to become the teacher I want to be—one who helps students have valuable conversations.

2. See an Interview with Beverly Daniel Tatum (edited transcript) at [http://www.pbs.org/race/000\\_About/002\\_04-background-03-04.htm](http://www.pbs.org/race/000_About/002_04-background-03-04.htm)
3. See “The Gardener” video, in which Camara Jones discusses the three levels of racism at <https://youtu.be/ktj4jGmUs6Y>

I no longer worry about this class session like I did three years ago. Melvin and Megan continue to create generous and thoughtful environments in which participants can really talk to each other, and students continue to prove that they are ready to have these difficult conversations. Even though they don't yet know each other well, they come in ready to hear people out and talk through the readings. Instead of seeing this class session as the “racism” session, I now see it as a starting point for the whole semester—a starting point grounded in a sincere desire for us to figure out where we are and where we want to go.

## Additional Resources

- Daniel Tatum, B. (2003). Race – The Power of an Illusion, Background Readings. Available at [http://www.pbs.org/race/000\\_About/002\\_04-background-03-04.htm](http://www.pbs.org/race/000_About/002_04-background-03-04.htm)
- Western States Center. (n.d.). *Dismantling Racism: A Resource Book for Social Change Groups*. Available at <http://westernstates.center/tools-and-resources/Tools/Dismantling%20Racism>  
*The Resource Book* from Western States Center Dismantling Racism Project is a rich compilation of articles, poetry, worksheets, and references used to supplement information presented in their workshops. The materials “originate from a variety of sources and build on the work of many people and organizations, including (but not limited to) Kenneth Jones, Tema Okun, Andrea Ayvazian, Beverly Daniel-Tatum, Joan Olsson, James Williams, the Peace Development Fund, the Exchange Project, Grassroots Leadership, Equity Institute, the People’s Institute for Survival and Beyond, the Lillie Allen Institute, and David Rogers and Moira Bowman of the Western States Center.”

## Work Cited

Smooth, J. (n.d.). My TEDx Talk, “How I Stopped Worrying and Learned to Love Discussing Race.” Retrieved November 11, 2018, from [http://www.illdoctrine.com/2011/11/my\\_tedx\\_talk\\_how\\_i\\_stopped\\_wor.html](http://www.illdoctrine.com/2011/11/my_tedx_talk_how_i_stopped_wor.html)

## Endnotes

# Chapter 3: Why History Matters to Design Equity



*A pedestrian bridge between the divided Rondo neighborhood in St. Paul, MN. Once a thriving African American community, Rondo was split in two by the construction of Interstate Highway 94 in the 1970s. Today Rondo leaders are advocating for more substantial connections. Photo by [Tony Webster](#). [CC-BY 2.0](#)*

The history of how cities in the United States were designed, built, and rebuilt helps answer two important questions: Why doesn't equity mean everyone getting the same thing? And why doesn't equity mean equal? We will learn that the way cities were designed and planned meant, for so long, that many people got much less, or nothing, or had things taken from them. In some cases the taking was completely legal and based on unfair laws and regulations; in others, the taking was illegal. The term *equity* matters, and matters in terms of how we design and build our cities. For too long these processes and places have allowed some groups to access opportunities while others are left behind.

What's shocking is that, when I say history, I'm not only referring to things that happened 600 or 100 or 50 years ago. This history is happening *now*. It's just hard to see the pattern unless you look at the past and the present together. California Judge LaDoris Cordell presents one of the most succinct accounts of this history.<sup>1</sup> As you listen to her lecture, take special note of the stories she tells that relate to the built environment—to housing and housing financing, to planning and transportation.

**This history is happening now. It's just hard to see the pattern unless you look at the past and the present together.**

When I teach the Design Equity class, we watch a video that dives deeper into the planning of housing in cities and suburbs and the racial wealth gap that resulted.<sup>2</sup> Then we compile the dates from the readings and video into a large timeline so we can take it in at once. It's an awful moment, seeing it up on the wall. Awful if you are someone whose family experienced it, awful if you are experiencing more of the same today. And awful if you thought we were living in a post-racial world and had moved on since slavery and the civil rights movement.

But it can also be a moment when big chunks of our own personal racism—our unconscious belief that maybe some people are better than others just because of the color of their skin—can drop away. Those Black neighborhoods you sometimes drive by aren't falling apart because people don't care, they're falling apart because for years banks wouldn't give people loans to fix up their properties. Meanwhile, the houses in suburban white neighborhoods seem to have stood the test of time—but that's because the same banks gave cheap loans to white families.

### **Do environmental designers know this history?**

Do environmental designers know this history? I would argue that planners know this history better than designers. Most planning programs are tied to a social sciences program, and planning

history is more likely than design history to be taught from a social/political perspective. Most designers, in contrast, learn history from an art-history approach, one aimed at giving us a vocabulary of Western European styles and forms like Classical, Baroque, Beaux Arts, Modern, and Post-modern, and with a focus more on how things look than on how they impact people's lives. This is slowly changing, but not fast enough.

1. See "Risky Business: Confronting Racism in America" at [http://www.mprnews.org/story/2015/10/30/mpr\\_news\\_presents](http://www.mprnews.org/story/2015/10/30/mpr_news_presents)
2. See "How the Racial Wealth Gap Was Created" at <https://vimeo.com/133506632>

The resources listed below will help us see the city and all its parts in a different way—as the physical embodiment of values that continue to shape how people live and what they can and cannot do. As visual cues to what is considered important and what is not, who is considered important and who is not, where power is and where it isn't.

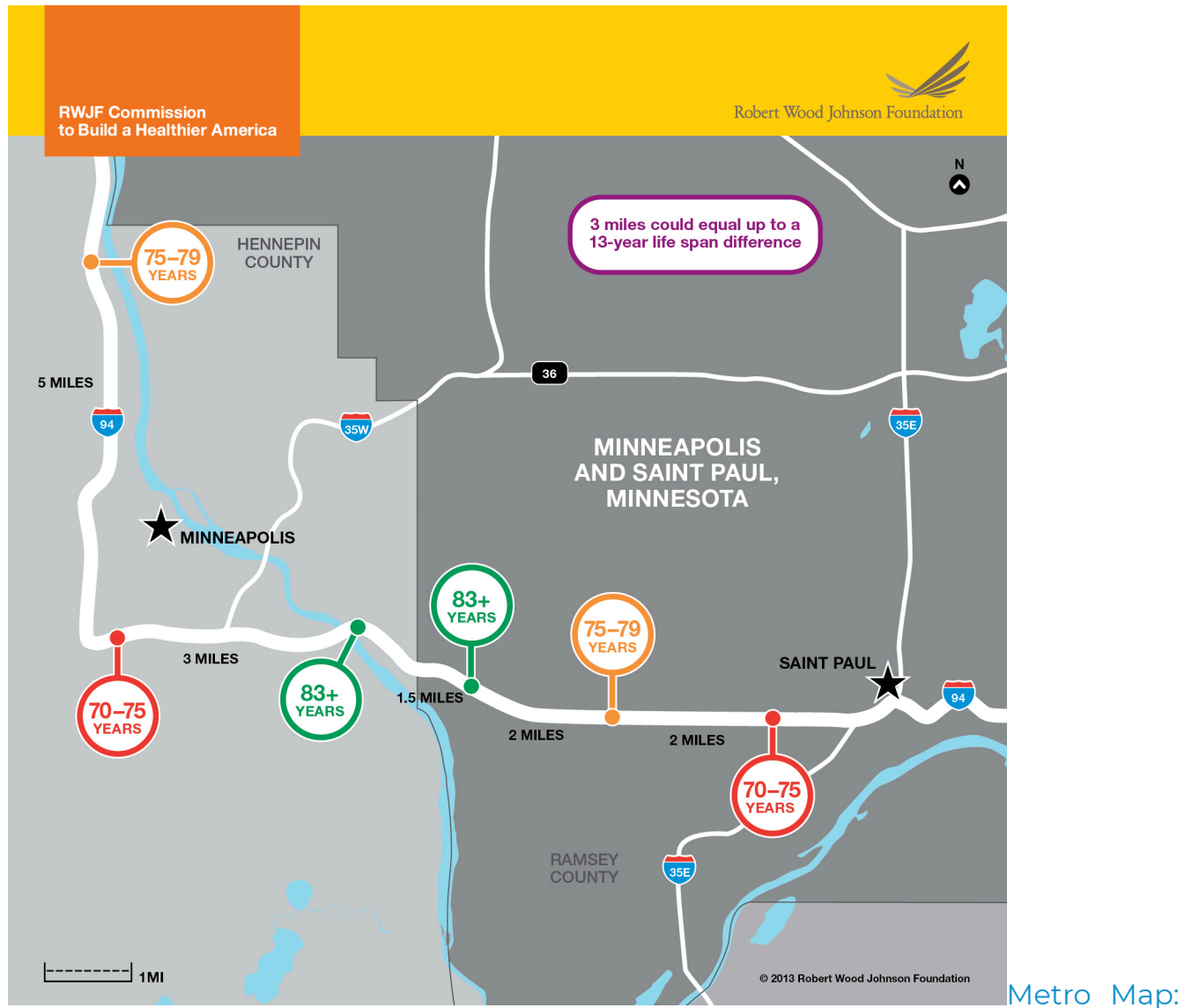
In the following chapters we will look at how people are trying to address these injustices from within different fields, like health, transportation, information, and housing. Each of these fields of equity research and practice takes on overlapping pieces of a complex puzzle. We will focus here on health, transportation, and information, mapping some of the ways in which each of these fields relates to what we have learned so far about equity and the built environment.

### **Additional Resources:**

- Sociologist and Dean of Pitzer College, Dr. Melvin Oliver explains the relationships among wealth, housing, and race. Oliver, M. (2003). Race and Wealth – Available at [https://www.pbs.org/race/000\\_About/002\\_04-background-03-05.htm](https://www.pbs.org/race/000_About/002_04-background-03-05.htm)
- Hayden, D. (2001, March). Revisiting the Sitcom Suburbs. Landlines. Available at <http://www.lincolninst.edu/publications/articles/revisiting-sitcom-suburbs> Professor Dolores Hayden describes the political roots of the post-war suburban housing boom. Also see Hayden's 2002 book: *Redesigning the American dream: the future of housing, work, and family life*. New York: W.W. Norton.

### **Endnotes**

# Chapter 4 - Health Equity and the Built Environment



Minneapolis and St. Paul, MN Infographic by RWJF on [RWJF.org](http://RWJF.org)

We will begin our exploration of the different equity fields with health equity. Health and health equity, as you will learn, encompass issues well beyond whether someone has fair access to medical care. We will learn that where you live has a major impact on how healthy you are and can be.

What is health? When we think of a healthy person we tend to focus on whether or

not they are ill, what they eat, and their physical fitness. But human health refers to a much broader set of issues. Health can be described as:

...more than just the presence or absence of disease. It includes the overall well-being of an individual, the ability of an individual to fully participate in the social interactions of a community, and a lack of barriers to good health across a life span. (Lopez, 2012, p. 12)

Based on this description, what factors would you need to consider to call someone healthy? What does “overall well-being” mean to you? What allows someone to fully participate in the “social interactions of a community”?

As I write this I’m thinking about my 83-year-old mom as an example of a healthy person. If you met her you might be surprised (and I’m sure she would be very surprised that I chose her). She’s never been what you would call athletic and has some arthritis in her back, but she’s also almost impossibly positive about the world. She engages strangers in conversation wherever she goes. She wants to live as long as she can to see how the lives of each of her six children and 13 grandchildren and two great-grandchildren play out. She tries to eat well, goes to “gentle yoga” twice a week, and gets together with old friends. She goes to see her doctor regularly. She still drives to where she needs to go; she lives out in the suburbs so nothing is within easy walking distance. She’s lived in the same town for more than 45 years and knows lots of people close by. The ones she doesn’t know probably had my dad as a middle school teacher. So even beyond her friends and my sister and her family, who are just a few miles away, she has a really good network of people to support her. She doesn’t have to worry about the bills, she has a retirement savings, all of her kids are self-sufficient, and she doesn’t have to take care of any ailing family members.

Even if you didn’t know all of those things about my mom, you could have predicted that she is a healthy person by her zip code.<sup>1</sup> People are often surprised to hear that someone’s zip code is a stronger predictor of health in the U.S. than their genetic code. But as we have learned, where someone lives tells us a lot about their income level and social status. If my mom had continued living in the zip code in which she was raised, and at the same income levels as her parents, her health may not have been as good as it is today. But after my dad served in the

**People are often surprised to hear that someone’s zip code is a stronger predictor of health in the U.S. than their genetic code.**

1. See “Zip code better predictor of health than genetic code” at <https://www.hsph.harvard.edu/news/features/zip-code-better-predictor-of-health-than-genetic-code/>

Korean War my parents were able to use the GI Bill for my dad to attend college. My mom's tuition was affordable (back when public universities were affordable), and they used an FHA loan to buy their first house together. Their incomes were thus higher than those of their parents, and as a result they had better access to healthcare and other things you need to stay healthy—including a safe home and neighborhood.

As we have learned from our readings on racial equity and post-WWII housing policy, people like my parents were lucky to be able to take advantage of federally subsidized low-interest loans and were not prevented from buying houses in suburban neighborhoods where homes steadily increased in value. Black families of the same generation, however, faced institutional and personal racism that prevented them from doing the same.

Our home was our financial safety net. If push came to shove, my parents could borrow against its steadily increasing value. I know there were times when they buckled down on household expenses, especially when my mom went to graduate school, but I don't remember the lights going out or not having food in the fridge. I know my dad would have liked to change jobs after too many years as a middle school shop teacher, but he was better off than his friends who lost their jobs as factories closed down in the 1970s and 1980s and unemployment skyrocketed in our region. His job security was another federal benefit from the GI Bill.

**Mental health is tied to physical health and both are tied to income.**

That feeling of relative security—or the absence of major stress related to finances—is another important connection between our health and where and how we live. Mental health is tied to physical health, and both are tied

to income. If you are worried about paying the rent, feeding your family, or the safety of your neighborhood, your stress level increases. Stress is tied to obesity, high blood pressure, and other chronic illnesses. As stress goes up, immunities go down, and you are more likely to get sick. If your job has no sick days you may get fired if you miss work, and unemployment leads to more stress and poorer health. Stress also has prenatal impacts. High levels of the stress hormone cortisol during pregnancy can affect fetal neurological development.<sup>2</sup> While my siblings and I

2. See “Acute stress in utero has negative effects later in life among poor children, Stanford sociologist finds” at <https://news.stanford.edu/press-releases/2018/08/14/inequalities-prenatal-stress/>

started with a big leg up because of our parents' financial stability, some people start at a disadvantage even before they are born.<sup>3</sup>

This is the health-equity double whammy: if you have the resources to stay healthy—physically and psychologically—you are better able to advocate for yourself and make sure that you can stay healthy. If your landlord refuses to get rid of the asthma-triggering roaches, you can move. If you don't connect well with your healthcare provider, you can get a second opinion or call a relative or friend who is in healthcare for some advice. But if you don't have these resources, you will probably become less healthy over time. Your declining health will lead to declining opportunities to earn money. You may end up with even fewer resources, and in an even worse situation.

## The Social Determinants of Health

As you will read in the Additional Resources section below, the social determinants of health include the conditions in which we live our lives, both physical and social: our economic stability, education, health and healthcare, neighborhood and built environment, and social and community contexts.<sup>4</sup> Only about 25% of our health is determined by genes, biology, and health behaviors. The other 75% relates to social determinants. Of those determinants, more than 40% of our health is determined by our physical environment. Some of the ways in which where we live impacts our health are highly visible: smog-covered cities, unsafe traffic crossings, a lack of parks for recreation and exercise, a lack of nearby health clinics or grocery stores, insect-infested apartments. Others are not as visible, like a lack of living-wage jobs, educational opportunities, social networks, and political power.

In other words, the place where you live is an indicator of your income level and social status, which are both key social determinants of health. And the place where you live—whether it has access to transit, parks, good schools, safe pedestrian environments, grocery stores, etc.—impacts your ability to be and stay healthy. The house where my mom grew up in Buffalo, NY became a vacant lot which sold in 2003 for \$1.00.

3. See Braveman, P. & Gruskin, S. (2003). Defining equity in health. *Journal of Epidemiology and Community Health*, 57(4), 254. At <https://jech.bmj.com/content/57/4/254.full.pdf>

4. See Centers for Disease Control and Prevention Social Determinants of Health Frequently Asked Questions at <https://www.cdc.gov/nchhstp/socialdeterminants/faq.html>

## Environmental Design as a Prescription for Health

Over the past 20 years, environmental designers and health researchers have argued that a way of bridging the health gap, especially for chronic disease, is to focus on the built environment. They contend that if we had better sidewalks and more bike lanes and parks, people would exercise more. If grocery stores selling healthful foods were in every neighborhood, people would have better nutrition.

But recent evaluations of such measures are leading health researchers to believe that physical changes to neighborhoods, though important, are not enough. The same patterns of institutional and personal racism that tie people to low or middle-class housing and neighborhoods also impact their freedom to take advantage of possibilities that might improve their physical and mental health. Adding sidewalks, grocery stores, and parks to low-income neighborhoods, for example, may do little to change people's health outcomes. These studies argue that we must also consider the interrelated issues of a person's life choices (their agency) and life chances (the underlying social and economic structures within which each person lives). Going for a walk to get some exercise, buying and preparing healthful foods, relaxing in the park with family and friends after a stressful work week, are all life choices that help us stay healthy. But whether or not we can make the "right" choices depends on the structural issues of how much time, money, and status we have: our life chances.

Thus structure and agency interact, with agency playing a role in choosing courses of action among available options that are structured by resources, norms, and class circumstances (Blacksher Lovasi, 2012, p. 173).

"Structural" issues, like income, can severely limit someone's ability to buy healthy foods, feel safe enough in their neighborhood to take a walk, and take time off work to see friends.

This is not to say that the built environment doesn't matter to a person's health. Rather, environment must be considered alongside agency and structure. Health can't be environmentally determined; physical changes alone to a neighborhood won't make the neighborhood's residents healthier. That said, in the case of health issues related to pollution, physical changes can protect people's health. People living in Flint, Michigan would not have lead poisoning if their water supply was safe. People would be less likely to be hit by cars if intersections prioritized pedestrian rather than vehicular movement. There are many opportunities to make broad changes and small improvements that would have a big impact on these kinds of environmental quality and safety-related issues.

**Creating and maintaining safe and affordable housing and preventing displacement is a key component of any health equity approach.**

Other recent studies have pointed to a Catch-22 related to health equity and improvements in the built environment. Improving sidewalks, parks, and intersections, and adding bike lanes and grocery stores, can increase the value of adjacent properties. Home owners benefit from these improvements. But people who do not own their homes may face rent increases, especially as

property taxes increase for their landlords. They may have to move, which destabilizes their social networks, brings on more stress, and may require a change in schools for kids and a longer commute to work. Consider what happens when a toxic waste site is cleaned up and turned into a park. This often leads to an increase in rents in the neighborhood, so that the people who had to live so long with these dangers of toxic waste don't end up reaping the benefits of the safe, new amenities. Creating and maintaining safe and affordable housing and preventing displacement is a key component of any health equity approach.

Since health is such a robust equity measure, touching all aspects of people's daily lives and the places where they live, it can seem almost impossible to imagine the kinds of changes that are needed to create health equity. How can we ensure that people have the agency to improve their health, and healthy environments in which to live? Some of the answers to these questions may lie in other equity fields, like housing, transportation and information equity. Other answers have yet to be identified or explored.

In "Reducing Health Disparities Through a Focus on Communities" (PolicyLink, 2002), the authors provide an overview of the social determinants of health and offer example strategies for addressing health disparities. As you read about these strategies, pay attention to the following questions: who might need to be involved in implementing them? What range of professional and community expertise is required? What barriers might arise? What is the relationship between changes to policies and changes to the built environments? What strategies might relate to the stories you heard in the "Unnatural Causes" video clips? Were there any issues raised in the videos that were not discussed in the report? In the next two chapters, we will read about transportation and information equity. Based on what you know about health equity, how would fair and just access to transportation and information help someone lead a healthier life?

By this point I imagine that your understanding of health has shifted. And because health is such an all-encompassing category, your view of

**As massive and intractable as the problems seem, there**


the world may have shifted as well. You may also feel overwhelmed by the scale and complexity of the problem of health inequities. Take some time to reflect on who you are, and the skills and unique experiences you could use to contribute to ongoing work on health equity. As massive and intractable as the problems seem, there are many ways to contribute. You may already be volunteering at a community garden or food-shelf, or reading to elderly people in a nursing home. All of these small efforts matter. Now that you have read about bigger scale efforts like those set out in the PolicyLink report and in the “Healthy Lives for All” report, where do you see your skills and experiences as being of value?

**are many ways to contribute.**

### **Additional Resources:**

- The “Reducing Health Disparities Through a Focus on Communities Report” from PolicyLink summarizes the social determinants of health and offers strategies for addressing health disparities in communities. Available at [http://www.policylink.org/sites/default/files/REDUCINGHEALTHDISPARITIES\\_FINAL.PDF](http://www.policylink.org/sites/default/files/REDUCINGHEALTHDISPARITIES_FINAL.PDF)
- Dr. Renaisa Anthony, Deputy Director (CRHD) at the University of Nebraska Medical Center discusses the impact of race, gender, and background on health outcomes. Available at <https://www.youtube.com/watch?v=ywQJGnzQKGs>
- The clips from, “Unnatural Causes,” a film about health equity issues will add depth to our understanding of the different health issues facing different communities. Available at <https://www.youtube.com/playlist?list=PLEF0280B25D0841C4>
- In the TEDxFargo talk by Dr. Donald Warne, you will learn about the health equity issues facing his community. How does Dr. Warne encourage us to define health? How does his definition of health relate to your own world view on health? What kinds of solutions might arise if health equity were addressed through this worldview? Available at <https://www.youtube.com/watch?v=3phTundagzQ>

### **Works Cited**

Blacksher, E. & Lovasi, G. S. (2012). Place-focused physical activity research, human agency, and social justice in public health: Taking agency seriously in studies of the built environment. *Health & Place*, 18(2), 172–179. <http://login.ezproxy.lib.umn.edu/login?url=https://doi.org/10.1016/j.healthplace.2011.08.019> 

Lopez, R. (2012). *The built environment and public health*. San Francisco, CA: John Wiley & Sons.

PolicyLink. (2002, November). *Reducing health disparities through a focus on communities report*. Available at [http://www.policylink.org/sites/default/files/REDUCINGHEALTHDISPARITIES\\_FINAL.PDF](http://www.policylink.org/sites/default/files/REDUCINGHEALTHDISPARITIES_FINAL.PDF)

## **Endnotes**

# Chapter 5 - Transportation Equity



*Twin Cities residents advocating for equitable transit.  
Thai Phan-Quang, photographer.*

An equitable transportation system is one that provides affordable transportation, creates quality jobs, promotes safe and inclusive communities, and focuses on results that benefit all. It also strengthens the economy by ensuring that all people—regardless of race, income, or ability—can connect to the education and work opportunities they need to participate in and contribute to society and the economy. (PolicyLink, 2016, p. 2)

In the previous section we learned that health equity is central to living the life you want to live and to building and maintaining our social networks. Equally important is the ability to move through

**Transportation is so important that, after**