

Centering Health Equity

**An open-source, beta
action framework for
built environment projects**

Centering Health Equity: An Open Source, Beta Framework for Built Environment Projects

v0.1 May 2021 beta

Centering Health Equity is a project to support stronger communities and business success through health equity in the built environment. It envisions a radical shift toward inclusion across the multi-sector fields that influence the design, delivery, and operation of real estate and public sector projects.

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foreword

Early 2020 marked the start of a long and tragic year as COVID-19 began devastating the United States. The pandemic forced us to face long-standing inequities in access to health and wealth within the U.S. and across the world. Like many people, a group of mothers, daughters, aunts, sons, fathers and uncles began asking why. Why do these social inequities continue to persist? What institutions, systems and sectors created these inequities? How does my industry contribute? What role might I play, either personally or professionally, in doing something to help us recover and become stronger equitably and collectively?

Beginning in April, this same group came together, drawing on Mithun and the Green Health Partnership's long-term integrated design and research initiative, Design for Health. Erin Christensen Ishizaki and Kelly Worden co-chaired a small, self-funded research team composed of practitioners in the built environment: designers, architects, urban planners, interior designers public health researchers, green building industry professionals and doctors. Together they launched nearly a year of reflection and engagement with over 60 professional peers to ask why.

This book, the v0 Centering Health Equity Frameworks, shares the collective answers to the Why and the What Now - from the team's perspective. Using their research, systems thinking and design skills, the team combined personal, professional, technical and academic perspectives from many different fields and sectors.

For an aligned approach throughout this messy process, the team used critical challenge guides to learn more about the varied dimensions of power and privilege within the real estate and infrastructure project delivery process and explore how they relate to today's crises.

The beta action frameworks are written primarily for built environment practitioners and share what the team learned, including research, technical guidance, policies and real project team stories in the hope that the frameworks will inspire others to challenge their practice in the pursuit of health equity and inclusion.

"You cannot dismantle what you cannot see. You cannot challenge what you do not understand."

-Layla F. Saad

how to get the most out of reading this

This research is for you if you are interested in business success and supporting stronger communities.

If you want to learn more about health equity and its ability to accelerate business and community success, start with the [overview](#) and [conceptual framework](#) to get the basics.

This is for you if your job is to build, maintain or operate buildings and lease real estate, develop land or finance projects, build and maintain parks, transportation infrastructure and utilities, support public health, write policies, establish programs or approve permits. Head to the [contents](#) to dive into a topic relevant to you.

If you are committed, ready to challenge your best practices and are looking for guidance on how to do it, skim the [conceptual framework](#) and jump to the [project breakdowns](#) to get ideas from other project teams. Then take a shortcut to the [action framework, tools and resources](#) and start testing it out on your projects. Ask your clients about it. Join the community of practice and [share your stories](#).

April 21, 2021

To my fellow practitioners in the built environment and public health:

We all have had a different experience of the combined health, housing, climate and public safety crises that converged in 2020. I am extremely grateful for my safety and my physical health. Grateful for the luxury I have to reflect on the state of my field through this research, as a White, cis-woman and partner at a private design firm in Seattle.

Last spring, I was launching an urban planning project in Kirkland, Washington, where COVID was first documented in the U.S. I spent the month of April conducting an equity impact assessment for that project and asking why here? Why, in this suburban community, with a significant percentage of seniors, high-income households and White Americans, many of whom don't neatly fit into the COVID-19 'high-risk' categories? As a built environment practitioner, what was I missing? What had we all been missing ... that our communities were so vulnerable to the sudden shock of COVID-19? I don't claim that I came up with any solid evidence, any obvious reasons about what first caused the breach and continues to cause suffering. What I did find, by studying American place-based history going back centuries, was some troubling overlaps between health epidemics and expanded travel infrastructure along with racial exclusion and colonial settlement.

My understanding of the generational impacts of racism and inequities in our built environment, and resulting societal vulnerabilities, was not new. I had dedicated my career to advancing affordable housing, community development and quality of life through planning and design. I was committed to the values of social equity and had thought that I was following best practices and

a people-centered approach. Yet, I had never deeply considered whether there was a connection between the definition of those best practices and perceived technological advances in building and infrastructure with significant declines in our collective health. After all, this was our industry solving problems.

But, did we ever had a handle on all of the possible ripple effects that come with those solutions? Was relying on proven methods, as defined within a deterministic and colonial frame, making the problem worse? Could the confounding nature of these crises be stemming from the power dynamics of our political and economic systems that always will adapt to secure finite resources? How successful can we be when the health of people and the finite resources that we rely upon are deemed "externalities" or "mediating factors", secondary to financial success? The legacy of these "external" human impacts are truths that marginalized and racialized people have lived with and fought for generations.

As I tried to piece together the reasons for the severe and disparate health and wealth impacts of COVID-19, I called my friends and collaborators, Kelly Worden and Dr. Matt Trowbridge. I wanted to better understand how I, and possibly our industry, could have such a fundamental blind spot. I was concerned that during crisis response, reliance on best practices and the evidence-base would only make things worse. Those conversations were the seed of our Centering Health Equity project.

That June, as the country was reckoning with George Floyd's murder and calls for racial justice resounded, a personal connection motivated me to challenge the fundamental nature of our industry. I heard an outcry from Black American moms fearing for their children's

survival. I never needed to have had the “talk” with our mixed-race Japanese American boys about staying safe in public, and our privilege had kept us well. Yet the air was heavy as my youngest son was experiencing his second health epidemic and wildfire/smoke season in as many years; while tear gas from the Seattle Police Department wafted through our windows and sickened us.

That connection and emotion helped to launch our Centering Health Equity project in earnest, as a self-funded effort to learn and understand our own dimensions of power and privilege within the real estate industry. I felt the need to do my own work to examine my own Whiteness and how it plays out professionally. I am grateful to my colleagues, to Mithun’s R+D program, to my friends and family who gave me the utmost luxury of feeling safe and supported to engage in that work.

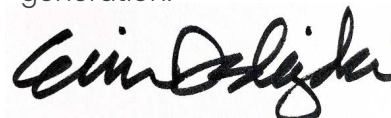
For guidance, I drew my inspiration from Tamika Butler who asked [5 Questions](#), and who, along with Ascala Sisk, Vedette Gavin, Odetta MacLeish-White, Kelly Worden and many others created [Confronting Power and Privilege](#), and from Jay Pitter, who created [A Call to Courage](#). Using these works as guides, I approached the research in a deeply personal way to examine my own social position related to my upbringing, race, gender and class and how that position affected my career trajectory. I searched to understand blind spots in our historically White-led fields at large. I acknowledge that the very nature of blind spots makes them difficult to find.

This self-examination process was a first for me and as I engaged in conversations, I did my best to bring an openness and earnest desire to see my own long history and dimensions of privilege. Yet as a White researcher

of privileged social status studying health and social equity, power dynamics were at play, especially with racialized team members, contributors and reviewers. I am eternally grateful to my Centering Health Equity co-chair, Kelly Worden, our teammates Dr. Matt Trowbridge, Emma O’Connor, McKayla Dunfey and Robinick Fernandez and to colleagues Deb Guenther, Laura Durgerian and Rodolfo Rodríguez for helping to call out my blind spots in this process.

I recognize that the approach that we took to assess the field necessarily relied on our own networks, which are largely White professionals in positions of relative power, while leaving out the voices of people who have been most impacted and marginalized by health impacts over generations. The beta Frameworks are intended to guide other practitioners in our industry to reconsider their base assumptions. I realize that undoubtedly there is the potential of bias and the risk of continued White centering with our approach. Thanks to a round of critical review and important feedback, our team restructured the Frameworks to clarify our positionality, with the aim to meet our goal of raising marginalized voices and highlighting resources developed by people with personal and professional expertise in the very issues that we are trying to change.

My hope is that this is just a starting point and by sharing my story I can encourage others to challenge our industry and push towards radical inclusion. I believe that constructive criticism is essential in our collective fight for resilience and welcome all to join this practice of asking why. I dedicate these ongoing efforts to the next generation.



-Erin Christensen Ishizaki

April 21, 2021

Fellow public health and built environment practitioners,

As a public health professional and researcher, my work is driven by a focus on reducing inequities. I was drawn to the built environment because it influences many, if not all, root causes of health equity. While health equity has been an inherent goal of my work from the start, only in the past few years have I recognized that in order to actually center health equity within my professional work, I first need to do some personal work.

In 2018 I had the opportunity to participate in the Salzburg Global Seminar. Participating was an honor, one I credit to and thank the Robert Wood Johnson Foundation, specifically Sharon Roerty, for enabling. The Seminar was focused on healthy, equitable community development and was - as the name implies - global in nature. The Seminar allowed me to interact with and learn from leaders in equitable community development from around the world. Conversations there also revealed the deep roots and persistent impact of White supremacy and White colonialism on community development everywhere, not only in the U.S. It quickly became clear that even in a room full of global fellows, we didn't have a common understanding of the problem we were trying to solve nor did we have a framework to guide safe and productive collaboration.

In response, my working group embarked on a conversation about how to build a better understanding of health equity. We revisited the typical figure that's used to describe the differences between equality and equity - the one with the kids looking over a fence to view a baseball game. Instead of lingering on how to create more right-sized boxes to ensure that every kid gets the specific boost needed to view

the game, we asked ourselves, what would happen if we simply removed the fence? Why isn't removing the fence ever part of the health equity conversation? And - if we were to remove the fence - do we even know where the fences are?

What resulted was the Salzburg Statement on Confronting Power and Privilege for Inclusive, Equitable and Healthy Communities. I am forever grateful to Ascala Sisk, Odetta MacLeish-White, Vedette Gavin, Tamika Butler, Liz Ogbu, Veronica O. Davis, Nupur Chaudhury and others for sharing their expertise, unique skill sets and perspectives to guide the emotion-intensive discussion that informed the Statement. Through vulnerable, "Brave Space" conversation, I was able to recognize that due to my own White privilege, I hadn't questioned the core workings of my society because I didn't have to - for the most part, they've benefited me.

Coming home from Salzburg I was both exhausted and energized. I was eager to leverage my position at USGBC to disseminate and translate the principles of our Salzburg Statement for use by green building and public health practitioners. But I didn't act right away. While I felt like our conversation in Salzburg represented a breakthrough in how the entire industry might approach health equity, it wasn't immediately clear to me how I would advise the average building practitioner to do something different tomorrow. But maybe that's my White Apathy talking.

Fast forward to 2020. The COVID-19 pandemic provided me with both the time and sense of urgency to act. I've been honored to call Erin Ishizaki a friend and collaborator for the past six years. I cannot overstate how inspiring her work on the Mariposa project has been to me and my entire Green Health Partnership

team. When Erin reached out in April 2020 to learn more about the Salzburg Statement (thanks to that great APA LA webinar) and discuss how we might do something to help organize our peers in efforts to address health equity, my first reaction was to feel relief. Relief that I wasn't the only one unsure about how to respond to the overlapping health, social equity and climate crises that were front and center in 2020.

This project comes while I'm still early in my journey of confronting my own power and privilege. Over the past year, I've valued the space provided by this project to engage in self-reflection alongside a group of trusted colleagues. I'm thankful for the financial support from our Robert Wood Johnson Foundation grant that made this project possible and recognize that having financial resources to support this type of reflection is itself a privilege.

I also continue to be thankful for the BIPOC experts within my field who take the time to share their expertise and call out the industry's blindspots. In the wake of George Floyd's murder in May 2020, [Bryan C. Lee Jr's article](#) on design justice was a stark reminder of the need to question best practices. Our industry wasn't built on inclusion and disparately impacted communities rarely are involved in the creation of best practices. Additionally, our environmental, public health and societal conditions and challenges continue to evolve. We must take an iterative, process-oriented and community-centered approach to promoting health equity through built environment practice.

That is the aim of this project, to support a process-oriented and community-centered approach. I enter this work with a spirit of humility, recognizing that there is a plethora of health equity resources and case studies available, many from BIPOC practitioners.


Yet my observation is that these resources may be challenging to access and apply in practice. This project doesn't aim to create new content, but instead to raise and organize existing content within the context of the typical project delivery process, to be more accessible to practitioners.

The "peer review" process that informed this initial phase of work self-identifies as insufficient. I'm cognizant of the lack of diversity in the backgrounds and perspectives that informed this initial phase. I thank our colleagues who have already helped us see our blindspots, Rodolfo Rodríguez in particular, and I'm confident that we have more blindspots to uncover. I offer this report as a way of showing our work - describing our underlying assumptions about the way the industry works and initial ideas about how it could improve - and I welcome critiques on our approach. Please do not let the polished look of this report mislead you: This project truly is a work in progress.

As highlighted by Lasla F. Saad, "[we] cannot challenge what [we] do not understand." My hope is that this project helps us build a common understanding about how real estate influences health equity so that we can work together to challenge the status quo and center health equity within real estate and built environment practice.

I look forward to working with you all towards radical inclusion within the systems and processes that create the built world around us.

In gratitude,



-Kelly Worden

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01 welcome

in-progress
the centering health
equity project

project overview

The year of 2020 made it impossible to ignore the overlapping, compounding effects of the health, social justice and climate crises. It also underscored the importance of charting a new course.

In April 2020, Mithun and the Green Health Partnership (GHP) came together to explore our own varied dimensions of power and privilege within the project delivery process, asking why health equity isn't a standard consideration within the real estate industry and generating hypotheses about how we might build back more equitably and improve community strength through recovery. While we've been working collectively on health issues and community development projects for some time, we have more to learn about how to embed health and equity together within our work.

Health inequity is driven by the variety of “systemic mechanisms that organize the distribution of power and resources differentially across lines of race, gender, class, sexual orientation, gender expression and other dimensions of individual and group identity.”¹

After some initial internal deliberation, the Mithun and GHP teams engaged a group of peers to explore these issues. This effort was guided by our belief that incremental, daily action on individual projects can make progress toward health equity and our observation that too often the individual practitioner feels overwhelmed by the task of solving health equity to get started (ourselves included).

¹ Baciu A, Negussie Y, Geller A, et al., editors. *Communities in Action: Pathways to Health Equity*. Washington (DC): National Academies Press (US); 2017 Jan 11. 3, *The Root Causes of Health Inequity*. Available from: <https://www.ncbi.nlm.nih.gov/books/NBK425845/>

Peer engagement provided insights regarding market conditions for health equity, illustrating it can enhance project financials and business success, and identified opportunities for proactive action as well as persistent, pervasive challenges. The engagement also informed development of a Centering Health Equity Conceptual Framework and Action Framework. Both aim to help multi-sector built environment practitioners use their varied dimensions of power and privilege to challenge conventional project delivery, improving community health and social equity.

The Conceptual Framework describes how design, real estate and infrastructure influence the social determinants of health and health equity. This conceptual framework is meant to support widespread discussion and collaboration on how to center health equity within a real estate practice.

The beta, open-source Action Framework aims to inspire, mobilize and focus project delivery teams in their everyday roles to promote health equity. The Framework organizes existing tools, insights and case studies within standard decision-making processes that guide the delivery of real estate projects. The Framework encourages practitioners to seek opportunities to share power and focus on community outcomes throughout project delivery.

**This project currently uses the term BIPOC, aligned with the National Organization of Minority Architects (NOMA) recommendations.*

Many factors influence health equity. Within the real estate industry, exclusion based on race and ethnicity has had outsized impact. The history of White colonialism has created significantly disparate, generational harm and trauma on the health and wealth of Black, Indigenous and People of Color (BIPOC)* and continues to manifest in our built environment.

Because of this outsized impact, this beta framework begins with race and envisions radical inclusion across all lines of identity and difference, aware that an intersectional approach is required to overcome pervasive health inequities.

We invite you to join us as we continue to ask:

What role does the real estate industry play in perpetuating social and health inequities?

What role might the industry play in addressing those inequities?

How can I, as an individual practitioner, help deliver projects that make a difference?

gratitude & acknowledgements

Gratitude

We deeply appreciate all of the practitioners and researchers who engaged with us so fully and openly. The beta Centering Health Equity Framework grew from your invaluable expertise, insights and lived experience.

Nearly 100 ideas were shared over the course of more than 20 individual and group conversations.

A special thank you to University of British Columbia Sauder School of Business, Dr. Murali Chandrashekar, and Chris Spelke for delving into the macroeconomic context and systems mapping of investing for health equity.

This project is built on the long-term Design for Health practice and research collaboration between Mithun and the Green Health Partnership. The project draws inspiration and courage from our colleagues who have challenged us along the way, including the Salzburg Global Seminar Fellows, the Joint Call to Action to Promote Healthy Communities and the Northwest Center for Public Health Practice.

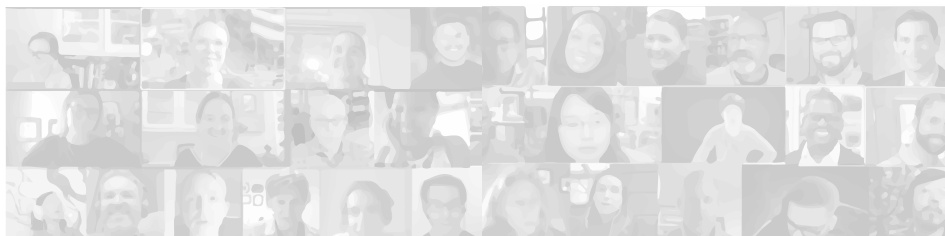
Acknowledging Team Positionality

Collectively, the Centering Health Equity team is majority-White, practicing in White-led multi-sector fields of built environment practice. We want change. We recognize that we are addressing these issues from our own positions of power and privilege.

As we approached this project, we asked ourselves:

How can we use that power to combat racism and health inequities? How can we challenge best practices and continue to improve? And how best can we use our skills as researchers and integrated thinkers for healing and empowerment?

We started by doing our own, self-funded work to learn and map the fence of injustice within our own industry. Our research to understand barriers to health equity drew guidance from the Salzburg Seminar's [Confronting Power and Privilege statement](#) and [Design as Protest Collective's Design Justice Demands](#).



We chose a mixed-methods assessment approach including engagement with a convenient sampling of practitioners to map decision-making within project implementation, literature review and applied lessons from active Mithun implementation projects and GHP research projects. We sought review from built environment experts at the policy, programmatic and institutional levels.

Of people who shared their demographic information (46% survey completion rate), the combined research team, contributors and reviewers identified as 77% White, 77% female and 77% had a master's degree or higher. In comparison to the building industry at large, this broader project team was slightly less White (84.8% of architecture, engineering and related workforce is White) and significantly more female (25.5% of architecture, engineering and related workforce is female). While we did engage a few perspectives outside of the U.S., the majority of the broader project team is based in the U.S., with 58% of the team in the western U.S. and 19% in the southern U.S.

We understand that the choice of this approach necessarily meant that in the production of these recommendations, we left out voices in those communities that are impacted the most by inequities.

Our initial assessment phase to understand power and privilege within real estate aims to define the problem more specifically and set the stage for open-source collaboration and co-creating solutions. **This initial phase was undertaken from the practitioner perspective, informed by the majority-White multi-sector fields of built environment practice, and with an aim to create space for growth and reflection without placing an unfair burden of teaching and associated emotional labor on people of color.**

We recognize that the most effective solutions to dismantle inequity have come from, and will continue to come from, people who are most impacted and who have both lived experience and professional expertise with the challenges that we are trying to overcome. During the research and engagement process, we sought lessons from projects that shift power and resources to BIPOC and marginalized communities, through influence on project decisions, leadership and capital.

The purpose of a continued open-source approach is to test and evolve the recommendations in a way that expands engagement of BIPOC and marginalized communities and continue to use the Framework as a platform to lift untapped BIPOC and marginalized communities' professional and lived expertise and shift power within our industries.

project scope

what is this project?

- » An attempt to describe health equity challenges and opportunities within the context of real estate project design, development and operations.
- » An effort to daylight the drivers of inequity from a real estate practitioner's perspective to support the learning and growth of those practitioners who have had the privilege of not experiencing or seeing firsthand the negative health impacts of generational inequities.
- » An open-source, collective impact model to accelerate health equity through a built environment community of practice.
- » A platform for gathering health equity insights, guidance and remaining challenges specific to the real estate industry in an open and collaborative manner.
- » A frame to highlight health equity opportunities and sometimes small decisions throughout the full project delivery process and operations that might have significant impacts on community outcomes.
- » A call for designers, developers, contractors, property managers, consultants, policy makers and planners to challenge and reform their practices.

what isn't this project?

- » A finished product or exhaustive.
- » A stand-alone effort.
- » A one-size-fits-all, top-down solution.
- » A substitute for leadership, inclusion and expertise of BIPOC professionals and communities (lots of great work by others included in the Action Framework as resources).
- » While the field needs to self-examine its practices, this project isn't intended to abolish the capitalist-driven industry of real estate.

To center equity in real estate and design, the field needs to self-examine and likely dismantle many of its practices. Many people are working on this endeavor.

Just a few examples of this substantial work are referenced in the [Action Framework](#) as resources.

guiding values

These values guide the Centering Health Equity project and were created together by the team and practitioner engagement.



Attribution: [Black Illustrations](#)

an imperative for inclusion

1. there is a history of exclusion within real estate that must be addressed: health promotion is an imperative for all, not an amenity reserved for a specific group.
2. buildings and assets exist to serve people and people should be at the center of our work from the start.



an integrated approach

3. because racism has caused significantly disparate and generational harm, health equity efforts should prioritize BIPOC communities while using an intersectional approach toward radical inclusion.

4. social equity, health, environmental sustainability and resilience are intertwined and should be addressed together.
5. individual practitioners should seek continual improvement to respond to changing demands and risks through self-assessment throughout a project's lifespan.





02 conceptual framework

"Health equity means that everyone has a fair and just opportunity to be as healthy as possible.

This requires removing obstacles to health such as poverty, discrimination, and their consequences, including powerlessness and lack of access to good jobs with fair pay, quality education and housing, safe environments, and health care.²"

—Robert Wood Johnson Foundation

² Braveman P, Arkin E, Orleans T, Proctor D, and Plough A. What Is Health Equity? And What Difference Does a Definition Make? Princeton, NJ: Robert Wood Johnson Foundation, 2017.

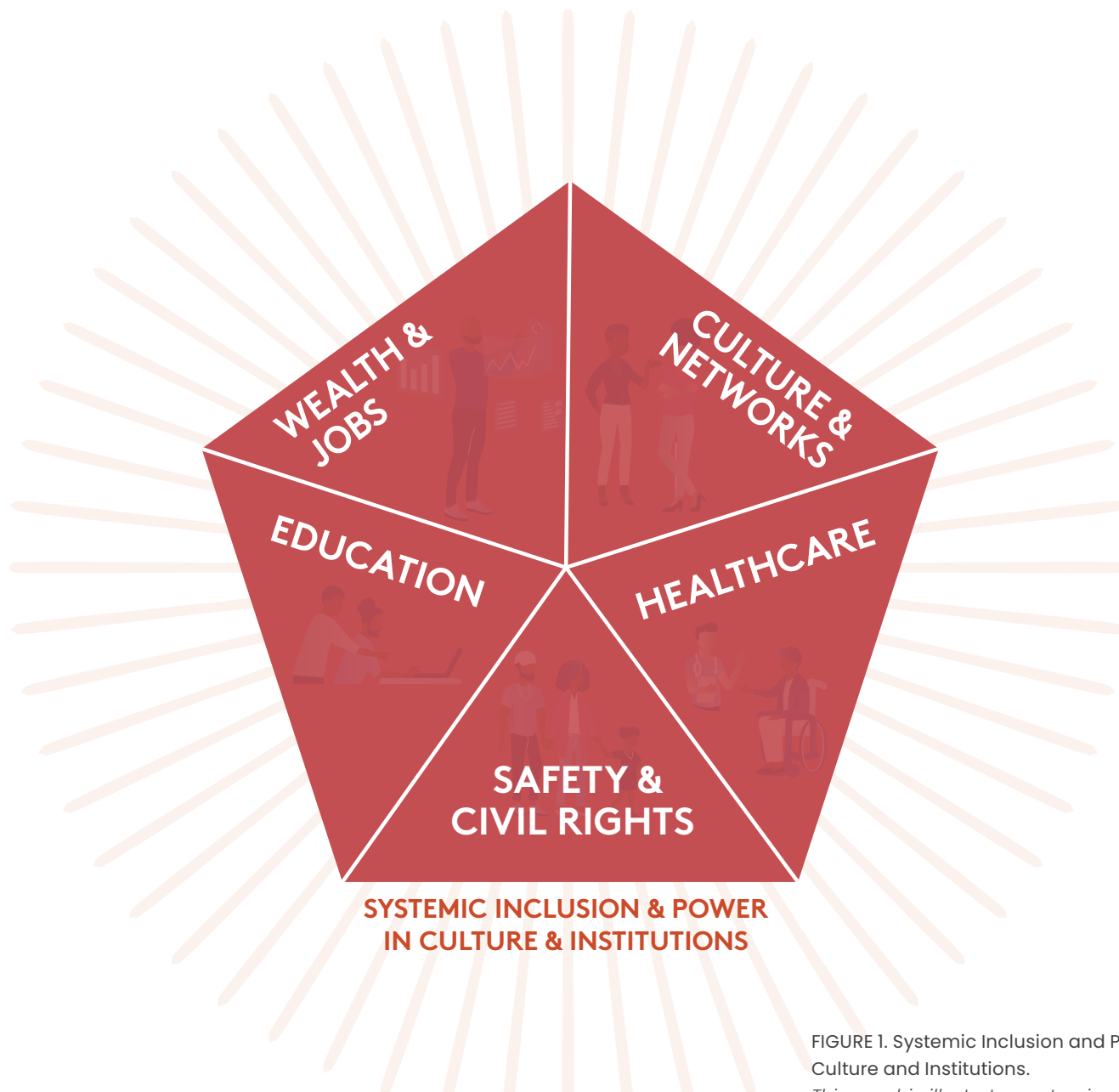


FIGURE 1. Systemic Inclusion and Power in Culture and Institutions.
This graphic illustrates systemic socioeconomic systems and incorporates art purchased from [Black Illustrations](#), founded by John D. Saunders.

inclusion drives health

» As recognized by the social determinants of health, the places that we spend our time have a tremendous influence on our collective health, well-being and ability to thrive.

» Layered cultural norms, institutions, systems and policies influence the delivery of individual projects and programs, which mediate access to fundamental life-giving resources.

» Inclusion in these systems, policies, programs and projects increases equitable access for people to fundamental life-giving resources and promotes human health equity.

A number of systems and sectors have created and continue to perpetuate population health inequities.³

This Centering Health Equity conceptual framework aims to highlight how projects in multi-sector real estate, infrastructure, design and planning fields mediate physical access to fundamental life-giving resources for people who interface with these assets.

The framework maps the influence, power and privilege held by different groups of decision-makers across the industry and highlights how projects may promote customer or user health, as well as broader community health equity.

The primary purpose of this conceptual framework is to accelerate action and a continual improvement mindset, acknowledging that while many forces affect project delivery, individual actions at both the

project and policy level have significant roles to play by advancing inclusion in just one or many fundamental, life-giving resources.

Many of these physical resources are, by their nature, limited and affected by industry and climate change. Therefore, efforts to promote health equity must be rooted in environmental sustainability and environmental justice.

We do not believe that more research into establishing the impact of real estate on health equity or defining best practices is needed.

We do believe that an adaptive mental model, guidance and an open-source community of practice can help practitioners and organizations embed health equity as a strategic imperative.

In the multi-sector fields that influence the built environment and project delivery, different disciplines tend to emphasize different root causes of health equity.

Conceptual frameworks are important because they shape how outcomes are perceived and direct effort and investment around proven interventions.

While social determinants of health models and studies are fundamental to describe the relationships between health and our physical, social and service environments, proven interventions often reflect a reductive approach.

In contrast, systems-inspired conceptual frameworks may stimulate new ways of thinking and help transcend false dichotomies,⁴ such as economic success and social equity are at odds with each other.

A systems-inspired approach also helps guide continual improvement of health equity practices and support resilience in the context of our constantly evolving and changing physical, social and policy environments.

3 Baciú A, Negussie Y, Geller A, et al., editors. *Communities in Action: Pathways to Health Equity*. Washington (DC): National Academies Press (US); 2017 Jan 11. 3, *The Root Causes of Health Inequity*. Available from: <https://www.ncbi.nlm.nih.gov/books/NBK425845/>

4 Diez Roux, AV. *Conceptual Approaches to the Study of Health Disparities*. *Annual Review of Public Health* Author Manuscript. August 2013.

By focusing on **social inclusion, every sector within the built environment fields of practice has an opportunity to advance health equity and improve resilience at multiple scales.⁵**

⁵ Salzburg Global Fellows (2020, Apr 20). *The Salzburg Statement on Confronting Power and Privilege for Inclusive, Equitable and Healthy Communities*. Salzburg Global Seminar.

What factors influence health equity in built environment projects and how are they related?

Fundamental Resources

Physiological needs are the basic foundation to support life, including air, water, sun and earth – which are finite and are affected by climate change⁶ – and food, shelter and movement to provide sustenance and safety.

Culture & Institutions

Culture and Institutions hold the broadest sphere of influence over human rights and wealth. Social determinants of health, including the justice system, healthcare, human services and education systems, and economic, commerce and food systems, set the rules for allocation of wealth and human rights. Culture and social networks, including media, art and religion, hold significant influence to set norms and control social capital of individuals.

Together, these meta mechanisms [as described in the fundamental cause model]⁷ are social determinants of health that have ripple effects on access

6 Luber G, et al. "Climate change impacts in the United States: The third national climate assessment." U.S. Global Change Research Program, 2014.

7 Williams DR. Race and health: basic questions, emerging directions. *Ann Epidemiol.* 1997;7:322–33

to resources and other health determinants. Centering equity and inclusion within these institutions is core to achieving health equity and the subject of substantive efforts that are aligned with our principles.

Generations of advocacy has advanced equity within these institutions and BIPOC-led initiatives continue to lead the way for political and cultural inclusion, environmental justice and social equity. As practitioners, we can support this advocacy and shift our own business practices to align with these efforts.

Structural Policies

Policies like land use zoning, fiscal policy and lending practices, environmental and transportation policy can advance structural inclusion and trickle down to transform projects. These policies play a significant role in setting the stage for inclusion and access to resources across real estate, design, construction and infrastructure fields.

Examples include land and home ownership, which serves as an important wealth building mechanism for many⁸ people, and climate mitigation, which is a global threat that places an unequal burden on low income

8 Causa O., Woloszko N., Leite D. (2019). *Housing, Wealth Accumulation and Wealth Distribution: Evidence and Stylized Facts.* Economics Department Working Papers No. 1588. OECD

communities and communities of color.⁹ Health in All Policies, One Health and Environmental Justice advocacy provide a framework for public health and a multitude of sectors to advocate for policies that encourage more equitable approaches to real estate and community development.

Projects & Programs

Projects and programs have the most immediate sphere of influence to support a more equitable distribution of life-giving resources. Projects and programs provide the physical infrastructure to support life and can encourage social supports to help withstand threats, shocks or pervasive stressors to our health.¹⁰

The project delivery process also influences inclusion and health equity in the financing, planning, siting, team selection, community engagement, design, construction and operation of capital projects – the actual places in which we spend our time.

9 Levy, B, and Patz J. "ClimateChange, Human Rights, and Social Justice." *Annals of global health* vol. 81,3 (2015): 310–22. *Rights, and Social Justice*; <https://www.sciencedirect.com/science/article/pii/S2214999615012242>

10 Mays, V. M., Cochran, S. D., & Barnes, N. W. (2007). Race, race-based discrimination, and health outcomes among African Americans. *Annual review of psychology*, 58, 201–225. <https://doi.org/10.1146/annurev.psych.57.102904.190212>

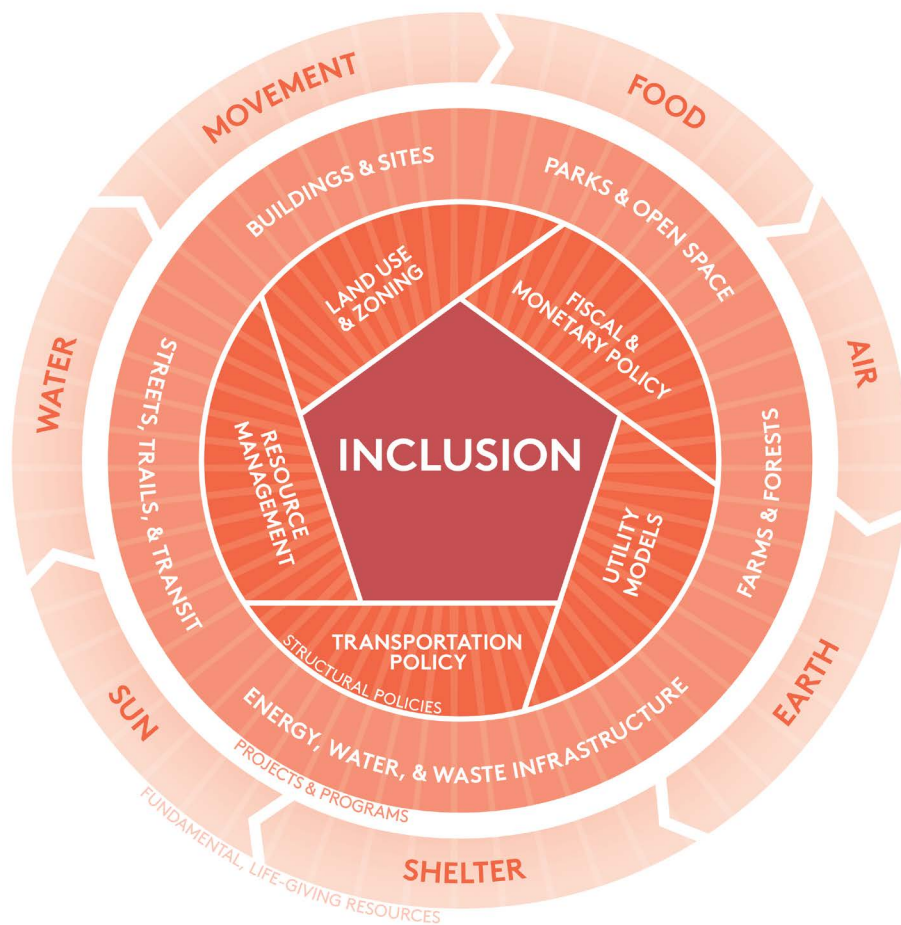


FIGURE 2.

Conceptual Framework for Centering Health Equity in the Built Environment

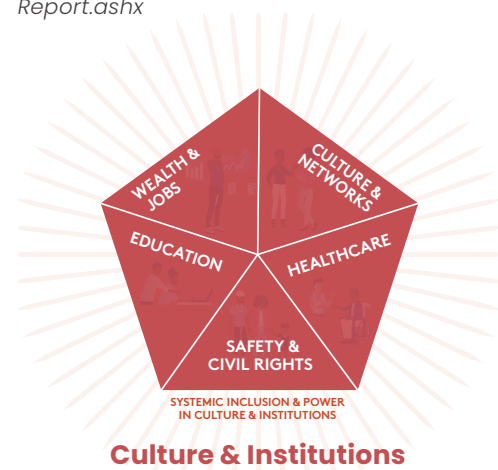
Projects, real estate and infrastructure mediate life-giving resources. By centering inclusion in our work, we all can accelerate health equity through our collective fields within the built environment.

Projects and programs [sphere 1] affect the distributional equity of limited fundamental resources for human health.

Policies [sphere 2] structurally affect the built environment and access to services.

Culture and Institutions [sphere 3, below] have systemic influence on inclusion and power and have ripple effects that extend through policies, projects, and programs.¹¹

¹¹ Bay Area Regional Health Inequities Framework. Accessed April 2021. <https://www.barhii.org/barhii-framework>; King County Racial and Social Justice Equity Theory of Change. King County. Accessed April 2021. https://kingcounty.gov/~media/elected/executive/equity-social-justice/2015/The_Determinants_of_Equity_Report.ashx



business as usual

how the industry works

who are practitioners in the built environment?

There are a wide range of sectors, areas of expertise and decision-makers who shape the built environment and who practice within the broad industry of real estate and project delivery. This section describes some of the key practitioners in a conventional project delivery process, assuming a traditional design-bid-build delivery.

While some nonconventional team members are described in this section, teams interested in expanding inclusion into project delivery within their project may use the worksheet in the appendix to reflect on their own team structure and opportunities to change those conventions.

Investors include a wide range of equity and debt sources, from lenders and trusts to shareholders or private fundraising. Publicly funded capital projects also may include mechanisms like bonds,

grants and tax credits. Different sources come along with varying levels of risk and reward and most come attached with specific requirements and criteria that projects must meet.

Owners and developers include corporations, REITs, large employers, public agencies like housing authorities, transit agencies and utilities, individual land and building owners and even anchor institutions like hospitals and universities. They drive the overall process of project delivery, adding value to land and selling a finished asset or project to a new owner. Community-based organizations, including community development corporations and other local organizations, may serve as developers, owners or play an advisory role.

Professional services include a wide range of consultants who serve developers, owners and

tenants or customers. Financial service providers may assist developers, owners and renters with securing capital.

Planning and pre-development

consultants include economic, legal and planning consultants who research markets, advise on development directions, strategy, community engagement and marketing. They help to conduct due diligence and test the feasibility of a development idea and secure land use permits. Design, architecture and engineering (A&E) and construction professionals and associated consultants include a wide range of disciplines, including from architects and engineers to landscape architecture, interior design, sustainability consultants, owners' reps and commissioning agents. Their job is to prepare a set of documents to secure building permits and guide the construction process.

FIGURE 3.
Decision-makers and stakeholders in project delivery

This diagram illustrates some of the common stakeholders and influencers during the stages of project delivery: Planning & Entitlement and Design & Build and ongoing Operations. The diagram depicts conventional decision-makers who are common in the industry and was created with help from practitioner engagement.



The **public sector** influences a wide range of root causes through policymaking from land use and building codes to transportation, climate and fiscal and tax policies. Public health consultants also may play a key role in helping project teams understand and align with community health priorities. Land use and building permits are issued by public agencies and regulate what a developer is able to build. These permits and authorization to proceed with

projects may hinge on the approval of boards, commissions or elections. This venue is where community members and advocates may influence projects the most.

Construction managers, contractors, and a wide range of subcontractors and suppliers provide a built asset to the developer within a fixed price and schedule. Brokers and Leasing agents bring the project to market and maintain tenants throughout

the life span. Facilities and operations managers and tenant services or program managers lead ongoing operations and user engagement.

Throughout the asset's life span, services like healthcare, education and utilities often are governed by boards and commissions. Social and human services also may be provided through partnerships and community-based organizations.

capital and high performance

Fundamentally, the real estate industry adds value to raw land, expending financial and environmental capital, and sells the finished product or asset to owners and tenants.

Conventional project performance focuses on financial capital gains that accrue to developers and owners from adding value by acquiring land use and building permits, making physical improvement or constructing buildings, and other activities as part of the development process. Impacts on the environment and people are conventionally considered externalities and not measured.

Beyond measures of financial success, “high-performance” within real estate for the past thirty years has been defined by largely White-led sustainable design, construction and operation fields with a focus on planetary health and environmental sustainability. This definition of high performance measures environmental capital flows.

Efficiency measures have reduced negative environmental impacts previously deemed externalities

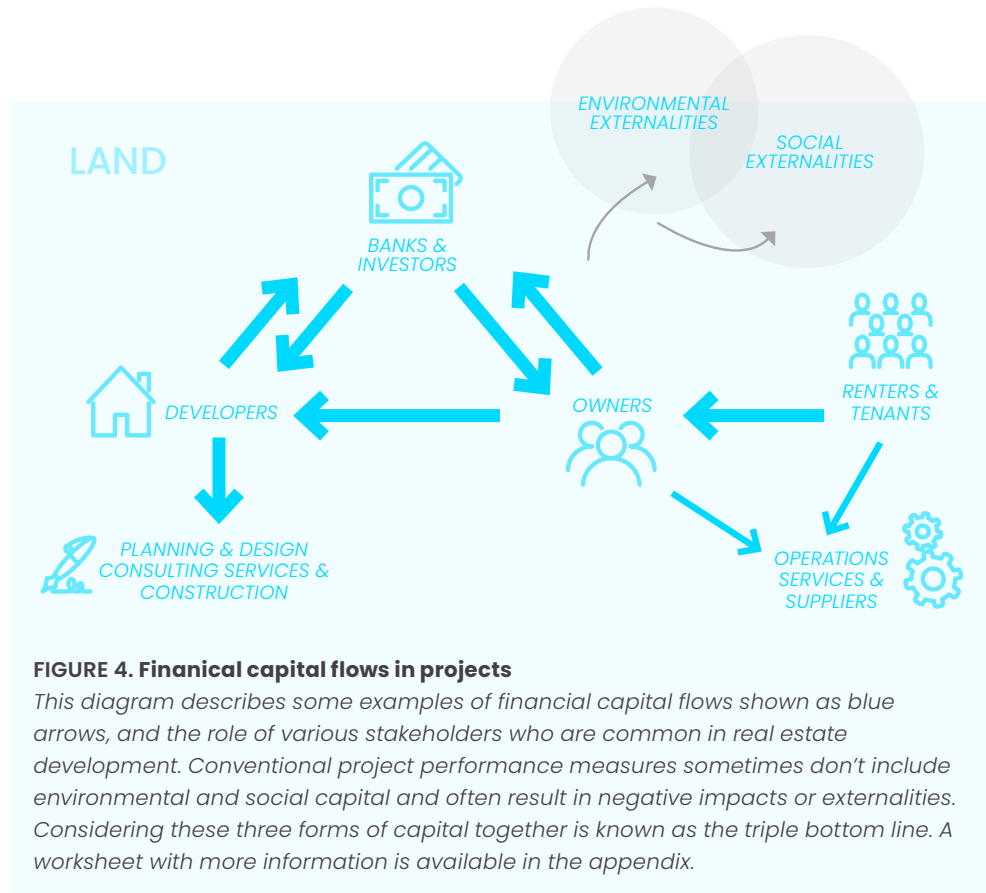


FIGURE 4. Financial capital flows in projects

This diagram describes some examples of financial capital flows shown as blue arrows, and the role of various stakeholders who are common in real estate development. Conventional project performance measures sometimes don't include environmental and social capital and often result in negative impacts or externalities. Considering these three forms of capital together is known as the triple bottom line. A worksheet with more information is available in the appendix.

and closed loop and regenerative models have created net zero or net positive impacts through resource production.

Social capital, or human resources and impacts, is a third form of capital influenced by real estate and development. Considering these three forms of capital together it is considered the triple bottom line. From the beginning, the sustainability movement has

advocated for triple bottom line thinking, but, near-term promotion of human health and social equity haven't been adopted in practice consistently.

As we begin to reconsider what defines high-performing real estate and infrastructure, tremendous potential exists to promote well-being through inclusive and regenerative financial and social capital models, while maintaining

a critical focus on resource conservation, climate change mitigation and resilience.

In addition to improving health and quality of life, evidence is overwhelming that social equity and broad access to opportunity increase economic development and community resilience for entire regions.¹²

For businesses, a focus on Sustainable Development Goals (SDG) and environmental, social and governance (ESG) reporting may provide a more holistic way of understanding and managing triple bottom line risk and value creation.

For explicitly impact-oriented groups, a commitment to social impact and shared value creation helps businesses outperform peers and deliver superior returns to society and shareholders.¹³

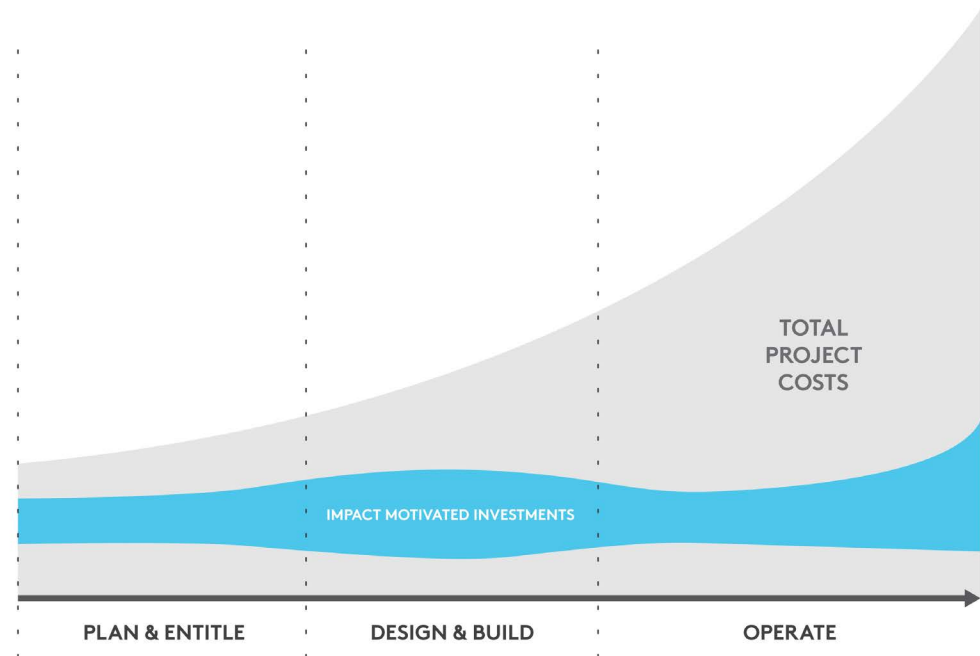
¹² World Bank. 2012. *Resilience, Equity, and Opportunity*. Washington, DC. © World Bank. <https://openknowledge.worldbank.org/handle/10986/12648> License: CC BY 3.0 IGO.

¹³ Porter ME, Serafeim G, Kramer M. *Where ESG Fails*. Institutional Investor. October 2019.

* Aluko, Yele (2020). *How organizations can unlock the business case for health equity*. EY. https://assets.ey.com/content/dam/ey-sites/ey-com/en_us/topics/health/ey-health-equity-webcast-whitepaper.pdf?download

"COVID-19 has demonstrated the direct correlation between the health of a workforce and the resiliency of the business."

-Yele Aluko MD, MBA, EY Americas Chief *



Impact motivated funds

Although impact investing has gained significant interest over recent years, our research found that a very small proportion of project funding is motivated by social impact and moral good.

the socio-
economics
of place

7 million

affordable homes shortfall nationwide

24%

of all school buildings are in “fair” or “poor” condition but are disproportionately located in poor neighborhoods due to funding tied to property tax revenue

\$212,000

less in home equity for Black families associated with racist redlining policies

71%
nearly 1 in 2

of Black Americans and

Latino Americans

live in places exceeding federal air pollution standards due to the systemic construction of highways and polluting industries in communities of color

Sources:

Aurand, Andrew, et al. “The Gap: A Shortage of Affordable Homes.” Washington, DC: National Low Income Housing Coalition, 2020.

American Society of Civil Engineers. “Schools D+: 53% of schools need improvements to reach “good” condition.” 2017.

Anderson, Dana. “Redlining’s Legacy of Inequality: \$212,000 Less Home Equity, Low Homeownership Rates for Black Families.” 2020.

Quintero, Adrianna et al., “US Latinos and Air Pollution: A Call to Action” Natural Resources Defense Council, 2011.

the socio- economics of the industry

0.3% of architects are Black women

1.3% of global real estate assets are invested in women and minority run firms

77.6% of senior executives in commercial real estate firms are White men

69.3% of property and real estate managers are White

Landis, K. Growth in Racial Diversity Among Architects is Slow, but Experts Say the Conversation Continues. Insight into Diversity. Accessed April 2021.

Segal, J. Asset Managers Owned by Women and Minorities Hagve to Work 10X as Hard for Assets. Institutional Investor. January 2019.

Lynn, J. Confronting Diversity Woes in Commercial Real Estate. Real Estate Solutions Advisors. Accessed April 2021.

Rocheleau, M. Chart: The percentage of women and men in each profession. Boston Globe. Data from U.S. Department of Labor. March 2017.

health, wealth and place

Historically, we have not seen widespread inclusion of all people with the systems that drive health. Systems of injustice within White-led fields of built environment practice created and continue to reinforce disparities in access to health-supporting and health-promoting resources, causing negative health impacts across generations within the U.S. and globally.

Exclusion due to race, gender, class and other aspects of identity may lead in many ways to compounding health inequities within the built environment. As one example, BIPOC systematically have been denied access to capital, creating barriers to homeownership and wealth building.¹⁴

Reduced levels of home ownership leave the same communities vulnerable to economic displacement and associated negative health outcomes.¹⁵

¹⁴ *Disparities in Capital Access between Minority and Non-Minority-Owned Businesses: The Troubling Reality of Capital Limitations Faced by MBEs.* U.S. Department of Commerce - Minority Business Development Agency. Accessed April 2021. Untitled.

¹⁵ *Race/Ethnicity and the Relationship Between Homeownership and Health.* American Journal of Public Health (AJPH). Accessed April 2021. <https://ajph.aphapublications.org/doi/abs/10.2105/AJPH.2012.300944>

The ownership of and access to real estate continues to be a key mechanism of implementing segregation in the U.S. — to the advantage of White communities and the disadvantage of BIPOC. The lack of home ownership and decreased access to real estate is a chronic, pervasive stressor for BIPOC individuals and families across our entire country.

Similarly, the real estate and infrastructure sectors are complicit in establishing and maintaining generations of barriers to healthy housing, clean air, reliable transportation and essential services.¹⁶

These disparities have been highlighted by the COVID-19 pandemic. While the pandemic has devastated the world, in the U.S., Pacific Islander, Latino, Indigenous and Black Americans have experienced at least twice the death rates of White and Asian Americans.¹⁷

¹⁶ *Systemic Inequality: Displacement, Exclusion, and Segregation - How America's Housing System Undermines Wealth Building in Communities of Color.* Center for American Progress. Accessed April 2021.

¹⁷ *Risk for COVID-19 Infection, Hospitalization, and Death By Race/Ethnicity.* Centers for Disease Control and Prevention. Accessed April 2021. <https://www.cdc.gov/coronavirus/2019-ncov/covid-data/investigations-discovery/hospitalization-death-by-race-ethnicity.html>

the bottom line

Acknowledging the direct impact of real estate on the health and wealth of Black, Indigenous and People of Color over generations is a first step.

Addressing these historic injustices requires action to diversify the industry workforce and take steps towards inclusion at all levels of built environment decision-making and influence.

change through collective impact

Despite the opportunities for improvement and leverage, our practitioner engagement found a gap between ideals and practice outcomes.

Below are some of the insights learned from practitioner engagement and common themes that we heard across multi-sector fields and geographic markets. Real project stories can be found in the [Project Breakdowns](#) section.

pervasive challenges



» **Real estate practitioners don't have a common understanding of health equity or an understanding of how the industry impacts root causes of health.**



» **High level, values-oriented frameworks lack guidance on how to operationalize health equity on a day-to-day basis.**

look for
real project
stories
[here >>](#)



» **Even leading-edge professionals don't have a solid understanding of the pieces of the project delivery cycle and how decisions drive outcomes.**



» **Development decisions move quickly and rely on pre existing systems, checklists and relationships.**



» **Financing and permitting often favor existing systems and best practices that typically don't work in favor of BIPOC communities.**



» **Even the best certification may miss nuances specific to each community—top down standards aren't equipped to address health equity sufficiently.**



» **The inertia of the status quo is strong, limiting access to land ownership and influence.**



» **Conventional funding doesn't support ongoing engagement and programs that center health equity throughout the project life cycle.**

Thank you to Dr. Chris Pyke, Chris Spelke, Emma O'Connor-Brooks, Hilary Noll, Mark Bokhoven, Dr. Murali Chandrashekar and Sue Powers for sharing your experience.

Historic injustices within the policies and practices that influence the built environment have manifested in population health inequities in an exponential number of ways.

We all have a role to play in advocating for equitable change in policies at the federal, state and local level.

While pushing for more just policies, we believe that everyday decisions present an immediate opportunity for all real estate, built environment and public health practitioners to make progress towards health equity on a project-by-project basis.

We do not believe that more research into establishing the impact of real estate on health equity or defining best practices is needed. We do believe that an adaptive mental model, guidance, and an open- source community of practice can help practitioners and organizations embed health equity as a strategic imperative.

We also believe that setting strategic organizational priorities around health equity will increase opportunities for project teams to embed these principles and practices on a daily basis and throughout a project's delivery cycle.

Built environment real estate and design practitioners, by recognizing the role of real estate and design in perpetuating racial and social inequities, have an immediate opportunity to engage in practices that shift power through project delivery and better support community agency to define success and co-create positive change.

Over the course of **nine months**, we engaged **60 practitioners** [\(see methods for more information\)](#) to explore these hypotheses, to examine the links between individual projects and health equity, identify where we can do better and continue to reveal our blind spots in this predominantly White-led field.



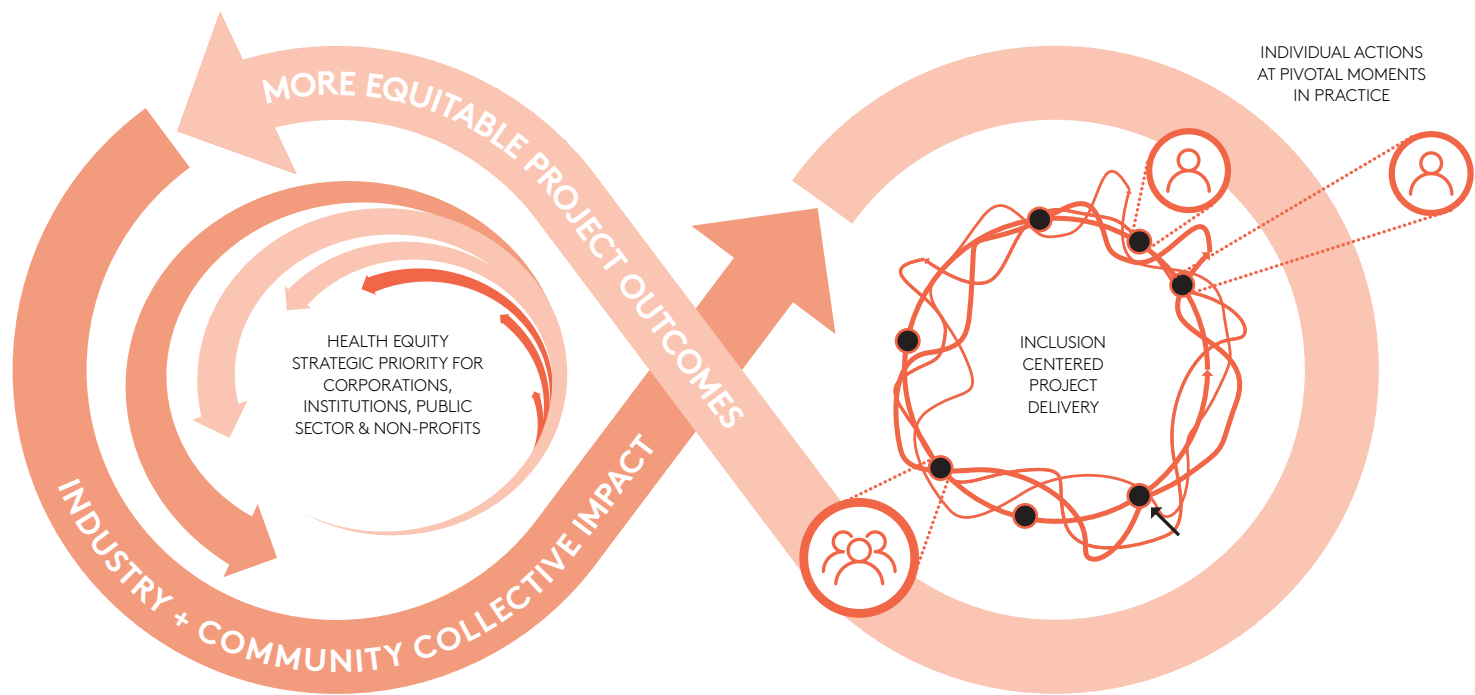


FIGURE 5.

Collective Impact of Individual Actions

This effort was guided by the belief that incremental, daily action on individual projects can embed health equity promotion can contribute to industry-wide change.



03 beta action framework

whole life cycle approach

How can we challenge our practice?

A key premise of the framework is taking a whole life cycle approach to real estate and design.

Small moments may have a significant impact on the health of all people who interact with our projects and shifting even one decision to center health equity may make a big difference.

Because real estate decisions move quickly relative to the life span of an asset or building and often are dictated by the requirements of the investment mechanisms and

funding programs that support them, teams should be ready with a set of strategies and resources that they can deploy.

By understanding the drivers within the built, social and service environments of our communities and infrastructure, practitioners can pivot to center health equity.

At every stage of project delivery, real estate and built environment practitioners have the power to plant flags and challenge conventional practices within their sphere of influence.

By shifting just a few critical decisions and processes at key moments, practitioners can work towards health equity outcomes as a strategic imperative.

Our research identified some key Opportunity Flags to integrate health equity promoting practices at pivotal moments during the stages of project delivery as well as the operations and management life cycle.

Examples can be found in the Project Breakdowns section [here](#).

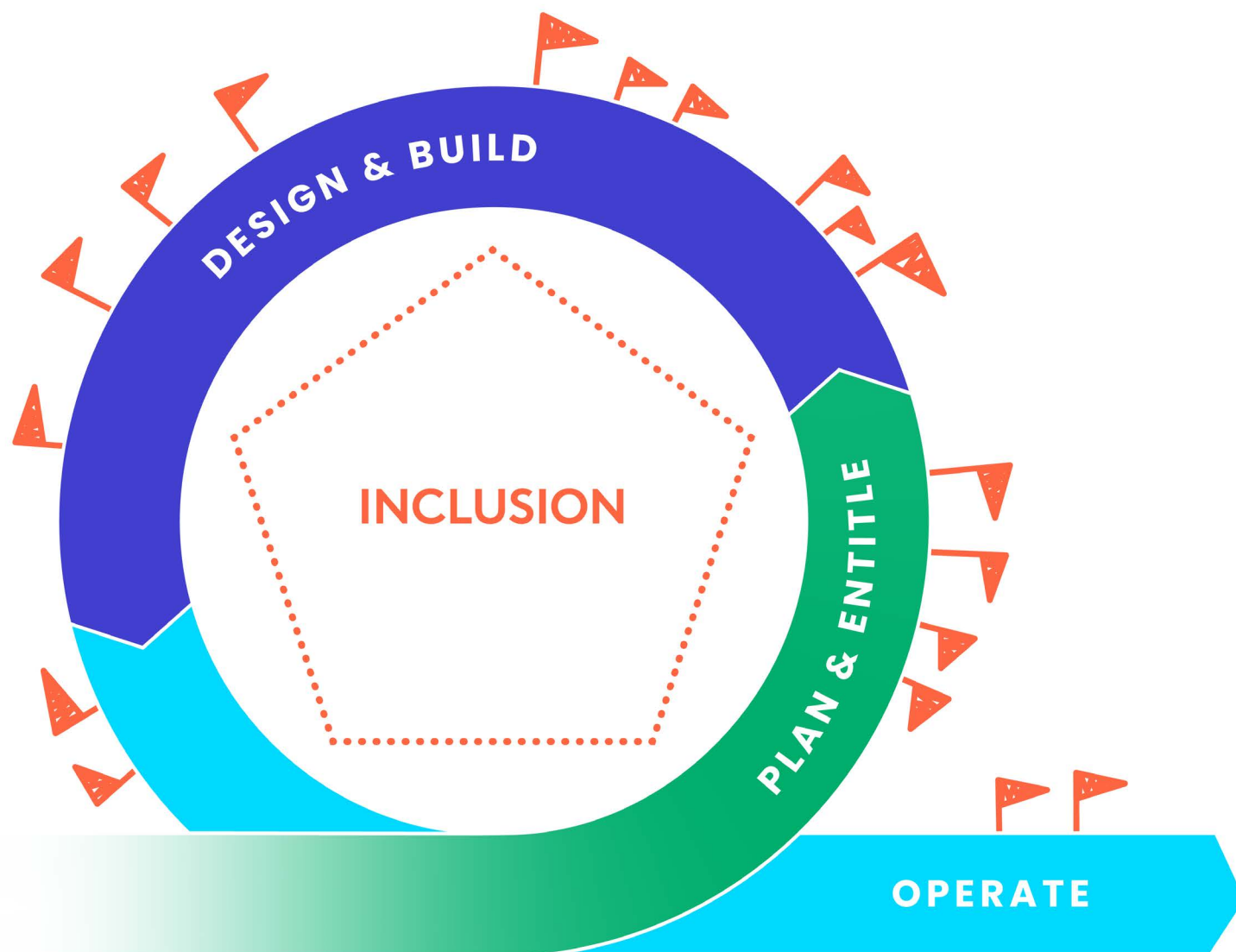


FIGURE 6.

Opportunity Flags for Centering Health Equity in Projects

What Does Centering Health Equity Look like in Practice? Our initial research identified key pressure points and challenges between the three major stages of project delivery: Planning & Entitlement, Design & Building and Operation & Management.

opportunity flags

While decisions move quickly, there are pivotal moments to plant flags and challenge practices that historically have been built on exclusion.

Below are some of the insights learned from practitioner engagement and common themes that we heard across multi-sector fields and geographic markets. Real project stories may be found in the [Project Breakdowns](#) section.



» **Establish a regular process to check your privilege. Remember that power in real estate is held by few people.**



» **Actively use, seek and compensate established and emerging guidance from BIPOC professionals without doing more harm.**



» **Reframe the idea of your expertise and allocate resources directly to the community.**



» **Communicate your vision and goals early to encourage health equity partnerships.**

»



» **Health and social equity criteria may inform site selection and due diligence.**



» **Discover and engage community environmental justice, health, equity and resilience initiatives.**



» **Seek understanding of disparate BIPOC experience and factors of exclusion and the racial histories of the place without doing more harm.**



» **Budgets should include appropriate compensation for community partners and compensate people for sharing their perspectives and experience.**

Thank you to Adele Houghton, Casey Huang, Deb Guenther, Dina Sorensen, Jorge Chapa, Katie Stege, Mark Bokhoven, Monica Gonzales, Rodolfo Rodriguez, Sue Powers and Tim Mollette-Parks for sharing your experience.

market conditions for health equity

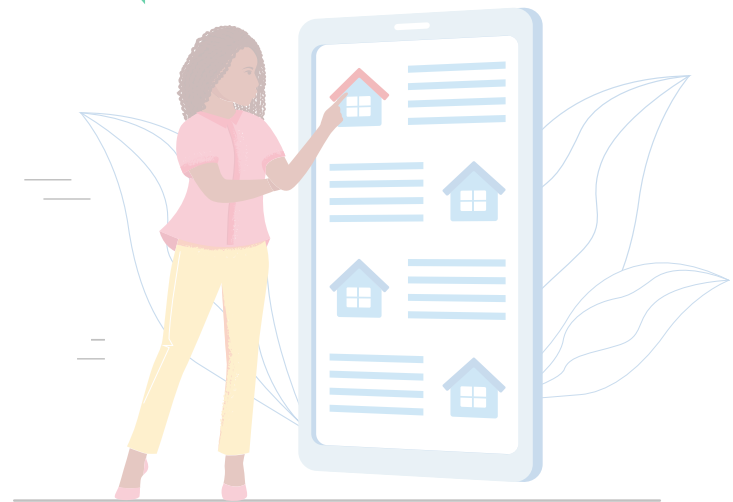
health equity is a business imperative

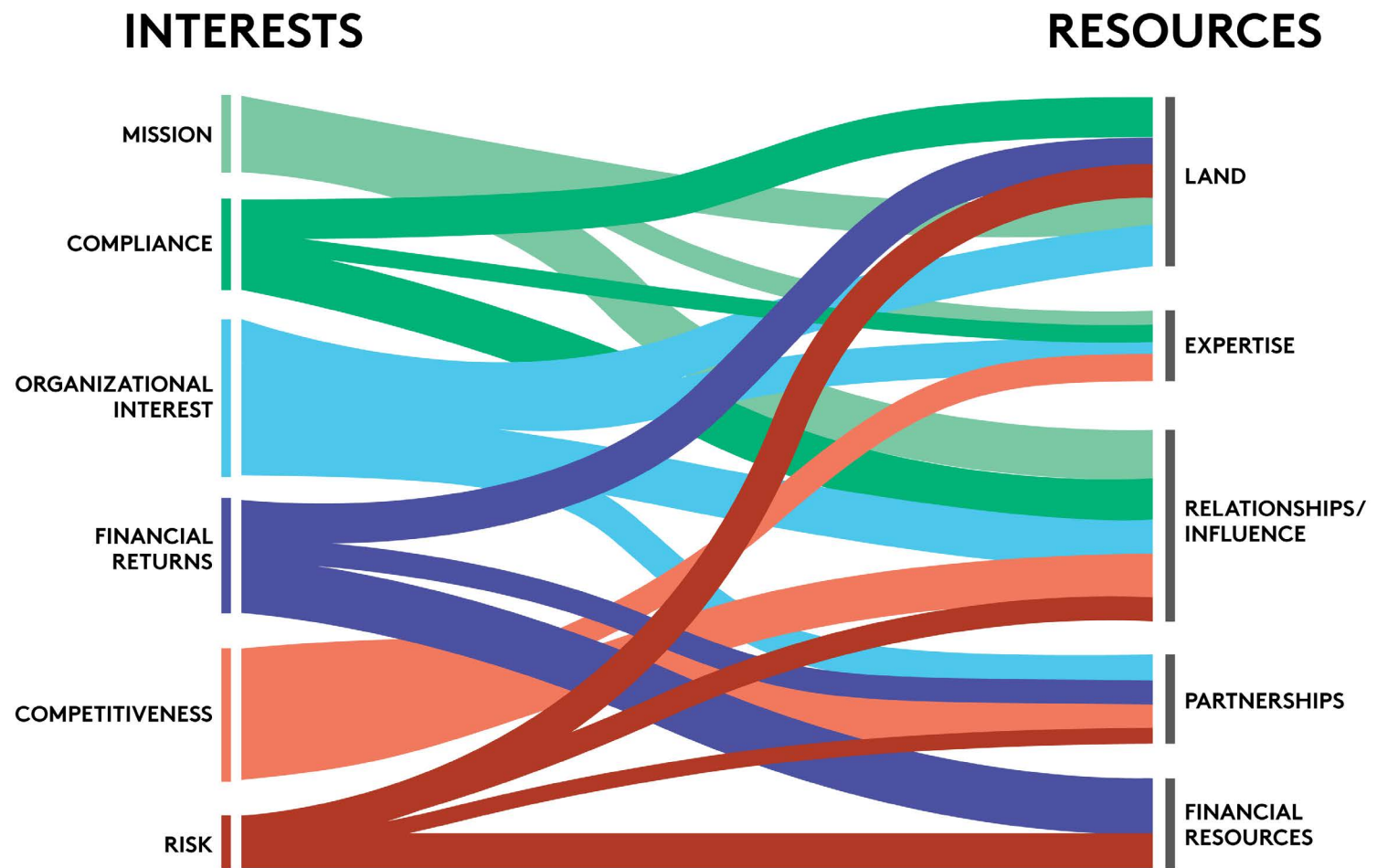
Although impact investing has gained significant interest over recent years, our research found that a very small proportion of project funding is motivated by social impact and moral good.

Our practitioner engagement corroborated that positive well-being, social and environmental outcomes are material to the success of projects—and in fact, health equity is a business imperative.

Yet, we also heard about the disconnect between the varied interests of decision-makers to promote health equity and the ability of project teams to operationalize those interests by knowing what resources they could leverage and how to influence health equity outcomes through project delivery and operation.

look for real project stories [here >>](#)





Market Conditions for Health Equity

Where do project teams see the connections between their jobs and health equity?

Our initial research from talking with practitioners identified a range of interests that motivate decision-makers to advance health and social equity in their projects as well as a range of resources that teams felt could be leveraged in pursuit of inclusion. In individual projects, practitioners inconsistently connect those motivating interests to leveraged resources.

what is our framework?

Our framework is a question guide that aims to help practitioners challenge conventional project delivery.

The framework consists of five strategies and supporting tools and resources that aim to create a common language and structure for project teams to operationalize health equity in projects.

This beta open-source action framework is meant to inspire, mobilize and focus teams in their everyday roles to think about how we do our work, where power and resources may shift so everyone thrives together. The framework was informed by practitioner engagement and developed to begin addressing some of the pervasive challenges to centering inclusion within real estate.

We hope to highlight the drivers of health equity and connect the dots within our sphere of influence throughout the full real estate life cycle.

We developed an Opportunity Question Guide to walk practitioners through these strategies and tools to help prompt reflection as you get started and at each stage of the project delivery process.

Action Framework Strategies

1. Reflect and Define Success
2. Influence and Decision Mapping
3. Reshape Project Delivery
4. Shift Practice
5. Share and Learn

Practice Tools and Resources

Based on insights from our practitioner engagement and learnings from project breakdowns, the Centering Health Equity team developed beta resources, including a Critical Path Decisions Worksheet, a Capital Flows Worksheet and a Project Breakdown template to share your project story. **The intent of these tools is to provide direct ways for practitioners to engage with this beta Action Framework and shape its development in an open-source community of practice.**

The Action Framework also references additional tools and resources that exist in practice across multi-sector fields. The framework elevates tools, resources and service providers that have been created or led by people who have experienced the most negative health impacts from conventional project delivery – BIPOC and impacted community members with lived and professional expertise.

strategy 1

reflect and define success

guiding questions

1. Have I taken the time to consider my own power and privilege and explore how it manifests within the project delivery process?
2. Do all decision-makers and team members have a baseline understanding of health equity? How might we support decision-makers and team members to normalize a health equity centered approach within this project?
3. What is the history of the community impacted by and served by the project? How might community health and social equity priorities be addressed by the project? What community groups should be involved in the project's visioning and goal setting?
4. Are we being inclusive in our definition of project user or customer?
5. What is our project positioning or value proposition relative to health equity?
6. Who could we contact to help us answer the questions on this page?

share your
ideas,
questions,
etc.
[here >>](#)

practice tools and resources

1. Salzburg Global Fellows (2020, Apr 20). The Salzburg Statement on [Confronting Power and Privilege for Inclusive, Equitable and Healthy Communities](#). Salzburg Global Seminar.
2. Trotter J, Defell J, Scott S, Hall R. (2021, March). [Centering Black People in Community Development: New Visions from Black Female Leaders](#). Center for Community Investment and Lincoln Institute of Land Policy.
3. Pitter J. (2020, June). [A Call to Courage: An Open Letter to Canadian Urbanists](#). Jay Pitter Placemaking.
4. Christmas-Rouse C, Jones B, Venable-Thomas M. (2020, Dec). [Building to Heal: A Framework for Holistic Community Development](#). Enterprise Community Partners.

strategy 2

influence and decision mapping

guiding questions

1. What is the typical timeline for key decisions? Where and when are decisions locked in?
2. Who holds outsized power within our decision-making process and structure? Who doesn't hold power? How might we redistribute decision-making power at all levels to elevate disempowered voices, including impacted community members, and promote health equity?
3. Do opportunities exist to integrate health equity considerations into key performance indicators (KPI) and decision-making criteria?
4. How might we ensure that direct capital gains or tax revenues from the development are directed into and not away from communities?
5. How does our project team delivery structure promote or reduce health equity? Does communication exist between practitioners involved in different project stages? How might we increase communication between community members and practitioners who influence project financials, planning and entitlement, design and build and operations to center health equity?
6. Who could we contact to help us answer the questions on this page?

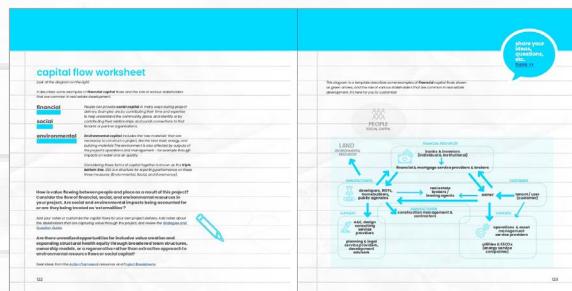
share your
ideas,
questions,
etc.
[here >>](#)

practice tools and resources

1. Design as Protest Collective. (2021). [Anti-Racist Design Justice Index](#). Design as Protest (DAP) Collective.
2. [Centering Health Equity Critical Path Decisions worksheet](#)



3. [Centering Health Equity Capital Flows worksheet](#)



strategy 3a

reshape project delivery: *plan and entitle*

guiding questions

1. In what ways can the project's scope create space for team members to center health equity more deeply?
2. Have we constructed our project team in an equitable and inclusive manner?
3. Does this project present opportunities to provide workforce training and/or hire locally?
4. Does this project align with local community initiatives? How might we address immediate socioeconomic community needs and long-term health and climate goals? How might we support existing efforts?
5. May we partner with local and BIPOC led groups and experts to inform project planning?
6. Do we understand the unique project or site history, including associated health equity assets and challenges? What is the history of exclusion in real estate, infrastructure and capital projects within this community?
7. Are we establishing processes to position health equity as a priority and steward the goals of inclusion and health equity throughout the project?
8. Who could we contact to help us answer the questions on this page?

share your
ideas,
questions,
etc.
[here >>](#)

practice tools and resources

1. Design as Protest Collective. (2021). [Anti-Racist Design Justice Index](#). Design as Protest (DAP) Collective.
2. Planning for Health, Equity, Advocacy, and Leadership (PHEAL). (2020, Sep). [PHEAL Principles - Planning for Health Equity, Advocacy, and Leadership](#), State of Place.
3. Pitter, J. (2021, Feb). [Healthy Communities Initiative Equity Guidance for Infrastructure Projects](#). Canadian Urban Institute.
4. Curran R, Nelson J, Marsh DS, Noor S, Liu N. (2016). [Racial Equity Action Plans, A How To Manual](#). Haas Institute for a Fair and Inclusive Society, University of California, Berkeley.
5. Christensen E, Runge C, Crangle K, Picard L, Powers S. et al. (2012). [Mariposa Healthy Living Toolkit](#). Denver Housing Authority, Mithun.

strategy 3b

reshape project delivery: *design and build*

guiding questions

1. Are we engaging contractors and consultants in a manner that promotes diversity and inclusion?
2. May we partner with local and BIPOC led groups and experts on project design and build?
3. How might we engage the community in a way that builds genuine trust between professionals and community members? May we hire a community member and/or local expert to facilitate the engagement or participate as an advisor?
4. Have we established defined check-in moments to ensure that health equity is stewarded as a priority throughout project design and build?
5. Do we understand the range of users and other people who will interface with the project? How might we shift from a one-size-fits-all health and equity approach to address unique community needs through project design and build?
6. Who could we contact to help us answer the questions on this page?

share your
ideas,
questions,
etc.
[here >>](#)

practice tools and resources

1. Young, N. (2020, May). [Healing-Centered Project Screen](#). Enterprise Community Partners.
2. NAACP (2019, July). [Getting Beyond Green: A Baseline of Equity Approaches in Sustainable Building Standards](#), Centering Equity in the Sustainable Building Sector, NAACP.
3. Design as Protest Collective. (2021). [Anti-Racist Design Justice Index](#). Design as Protest (DAP) Collective.
4. Enterprise Community Partners. (2020, Jan). [Cultural Resilience Assessment / Cultural Asset Guide](#). Enterprise Community Partners.
5. Enterprise Community Partners. (2020, Jan). [Convening a Cultural Advisory Group](#). Enterprise Community Partners.
6. Enterprise Community Partners. (2020, Jan). [2020 Enterprise Green Community Criteria Health Action Plan \(Criterion 1.5\)](#). Enterprise Community Partners.
7. U.S. Green Building Council. (2016, May). [LEED Integrative Process for Health Promotion Credit \(LEED Health Process\)](#), U.S. Green Building Council.
8. U.S. Green Building Council. (2018, Apr). [LEED Project Team Checklist](#), U.S. Green Building Council.

strategy 3c

reshape project delivery: *operate*

guiding questions

1. Are we engaging staff, contractors and consultants in a manner that promotes diversity and inclusion?
2. Do we have a policy for affirmative leasing and marketing? How do our tenant and community engagement programs and stewardship support inclusion?
3. How may our operations and management team adapt to changing needs over time? Inclusive/adaptive management, eviction policies and emergency procedures?
4. How can our purchasing policies and maintenance enhance health for all?
5. Do we have a process to monitor project performance and impact on health equity to inform ongoing operations?
6. How can our eviction policies be reexamined to eliminate health inequities?
7. Who could we contact to help us answer the questions on this page?

share your
ideas,
questions,
etc.
[here >>](#)

practice tools and resources

1. Bourcier E, Gould S, Givens M, Heller J, Yuen T. (2016). [Equity Metrics for Health Impact Assessment Practice](#). SOPHIA – The Society of Practitioners of Health Impact Assessment.
2. Green Health Partnership, GRESB. (2019, Sep). [Health & Well-being in Real Estate](#). GRESB.

strategy 4

shift practice

guiding questions

1. Have we reviewed best practices and referenced standards for health equity to determine positive or negative impact?
2. Are we supporting the health and well-being of team members in an equitable manner?
3. Are we considering impacts on the health of populations along the supply chain and waste stream when selecting materials?
4. Will we develop project design and programming to promote spatial equity and well-being?
5. Are we supporting cultural spaces in our approach?

share your
ideas,
questions,
etc.
[here >>](#)

practice tools and resources

1. Design as Protest Collective. (2020, June). [Anti-Racist Design Resources](#). Design as Protest (DAP) Collective.
2. Blackspace Urbanist Collective. (2015). [BlackSpace Manifesto](#). BlackSpace Urbanist Collective, Inc.
3. The Thrivance Group. (2013). [The Thrivance Project](#), The Thrivance Group.
4. NAACP (2019, July). [Getting Beyond Green: A Baseline of Equity Approaches in Sustainable Building Standards](#), Centering Equity in the Sustainable Building Sector, NAACP.
5. State of Place. (2016). [Urban Design Data & Predictive Analytics To: Optimize Resources](#), Drive Consensus, Build Trust. State of Place.
6. Enterprise Community Partners. (2020, Jan). [2020 Enterprise Green Community Criteria Health Action Plan \(Criterion 1.5\)](#). Enterprise Community Partners.
7. U.S. Green Building Council. (2016, May). [LEED Integrative Process for Health Promotion Credit \(LEED Health Process\)](#), U.S. Green Building Council.
8. HPD Collaborative. (2016, Nov). [HPD Public Repository](#). Health Product Declaration Collaborative.
9. Healthy Affordable Building Materials Project. (2021). [Healthy Affordable Building Materials](#). Healthy Building Network.

strategy 5

share and learn

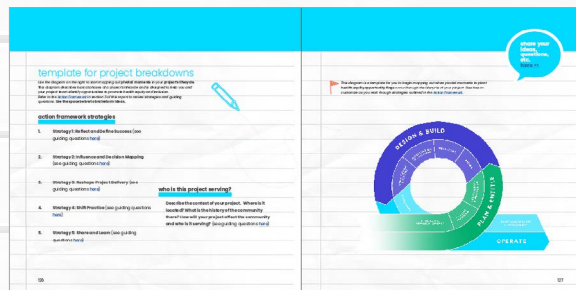
guiding questions

1. Are we engaging in a community of practice?
2. Are we participating in programs to increase project and performance transparency, such as project/portfolio certifications and/or benchmarking?
3. Are we evaluating our impact on health equity and reporting on our progress to stakeholders, community and the industry?

share your
ideas,
questions,
etc.
[here >>](#)

practice tools and resources

1. Bourcier E, Gould S, Givens M, Heller J, Yuen T. (2016). [Equity Metrics for Health Impact Assessment Practice](#). SOPHIA – The Society of Practitioners of Health Impact Assessment.
2. Green Health Partnership, GRESB. (2019, Sep). [Health & Well-being in Real Estate](#). GRESB.
3. [Centering Health Equity Project Breakdown Template](#): Share out stories with specificity by highlighting the health equity opportunity flags specific to each project phase



extra space

Here is extra space for reflection and exploration.

What additional questions, thoughts, ideas have occurred to you in this process?

share your
ideas,
questions,
etc.
[here >>](#)



community of practice

We invite you to join our community of practice to inspire, mobilize and focus teams with an open source integrated practice framework that promotes health equity through project delivery.

Challenge Our Practices

- » Join us in open-source conversation to examine our practices.
- » Commit to a continual improvement approach and accountability to each other.
- » Help make the framework better.

Highlight the Drivers

- » Help us map decision-makers and key drivers for trickle down health-equity outcomes within the project delivery process.
- » Research the varied motivations and assets of different sectors.
- » Understand linkages between upstream drivers and long-lasting health-equity impacts.

Collective Impact

- » As individual practitioners, it's easy to feel overwhelmed when considering how our industry contributes to systemic injustices.
- » Working as a collective allows for daily actions within individual projects to stack up and create positive societal impact.



04 project breakdowns

embedding health equity

real project stories from the field

Our research included conversations with developers, policy-makers and planners, designers, contractors, property managers, sustainability and public health professionals. They generously shared their insights and stories behind real project implementation in real estate.

These project breakdowns are a sampling of these insights. They include key decisions and actors, pivotal moments to plant Opportunity Flags within the whole project life cycle and practices that were adopted to promote health and social equity.

project breakdown:

Liberty Bank Building

Connecting with community history: Located on the site of the first bank west of the Mississippi River dedicated to serving the Black Community, the project honors a rich history and cultural significance.

Location:

Seattle, Washington

Program:

115 affordable housing units; resident lounge and workshop; bike storage; roof terrace with seating, gardening and play areas; 3,292 sf commercial space at street level; 18-stall structured parking

Team:

Planning & Pre-Development

Owner: Community Roots Housing

Project Development Partners: Africatown Community Land Trust, Black Community Impact Alliance, Bryd Barr Place

Design & Build

Dr. Sharon Sutton, Afrocentric Design Principles

Advisory Board of Community Leaders: Joquelyn Duncan, Derryl Durden, Michelle Purnell-Hepburn, Merle Richlen, George Staggers, and Pastor Witherspoon

Designer: Mithun, Doug Leigh, Bruce Williams, Anne Torney and Casey Huang

A&E Consultants: Rushing Company (MEP), Coughlin Porter Lundeen (Structural/Civil)

Art Curation and Artists: Al Doggett and Esther Ervin: Al Doggett Studios

General Contractor: Walsh Construction Co.

Operate

Leasing: Jaebadiah Gardner, Onpoint Real Estate

Facilities/O&M: Community Roots Housing

Tenants: Cafe Avole, Communion, Earl's Cuts



LIBERTY BANK BUILDING | SOURCE: MITHUN

project context

In the Central Area of Seattle, the displacement of the Black community, which shrank from 73% of the population in 1970 to 23% in 2010, is recognized as an epidemic.

Prioritizing anti-displacement

Located on the site of the former Liberty Bank, the first bank west of the Mississippi River dedicated to serving the African American community, this project honors a rich history and cultural significance. A shared equity ownership model was critical to the project's goals to support the long-term health and wealth of the neighborhood's African American community. The partnership was guided by a MOU. Community recommendations were essential to the project design, which incorporates salvaged elements from the original bank, exterior colors and patterns inspired by Afrocentric design and work by local artists.

Affordable units and healthy living

The project provides an attractive and affordable home for families earning between 30 and 60 percent of the area median income. To encourage community connections, the design features a welcoming entry courtyard flanked by lounge and workshop spaces, as well as a rooftop terrace with entertaining and children's play areas. A HomeFree demonstration project, Liberty Bank Building features materials that provide a healthier indoor environment for residents. Corridors are filled with daylight, and amenities like bike storage and container gardens support healthy lifestyles.

This project serves:

Residents of a historically Black neighborhood and the African diaspora in the greater Seattle region.

Priority populations included:

The African and Black American diaspora in the greater Seattle region

Project user demographics:

Racial/ethnic identity:

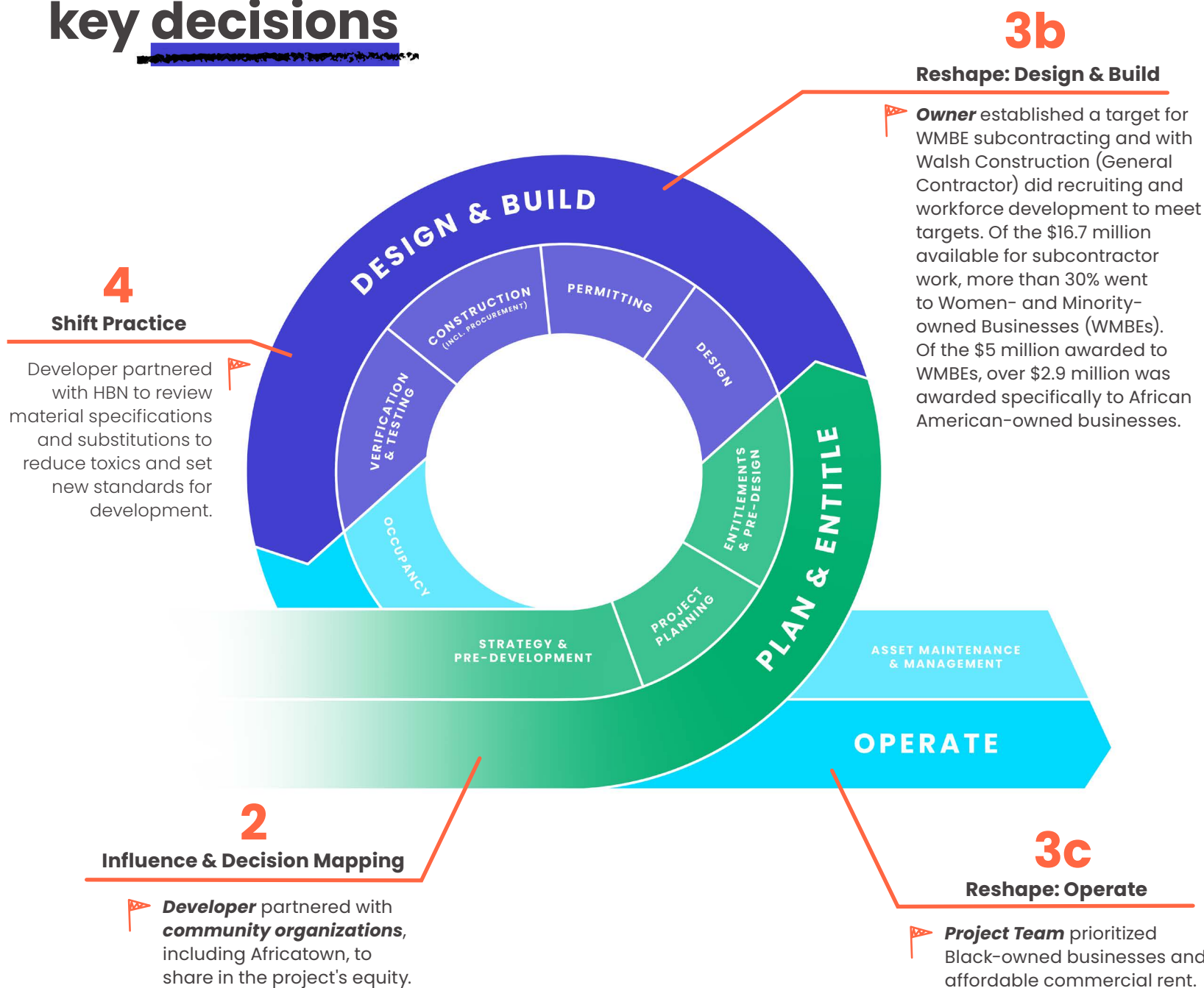
87% of resident households identify as Black (2019 data);
100% commercial tenants identify as Black-owned or WMBE businesses

Social class/income level:

All apartments are available for households with 30-60% Area Median Household Income



key decisions



"We hear a lot about shared prosperity and equitable development and this is a project that really makes that concrete."

-Wyking Garrett, Africatown Community Land Trust

2 Influence & Decision Mapping

The development began as a collaboration among four community organizations with goals to share equity in the project by transferring ownership from the developer, Community Roots Housing, to Bryd Barr Place and Africatown after 15 years to ensure long-term African American ownership of the building.

4 Shift Practice

Community Roots Housing partnered with HBN to review material specifications and substitutions to reduce toxics and set new standards for development that promote health and well-being for residents, employees, visitors and the community.

3c Reshape: Operate

Using affirmative marketing, Community Roots Housing prioritized Black-owned and local businesses along with affordable rent for first-floor commercial tenants. Community Roots Housing also helped establish a business innovation fund to support small, Black-owned businesses in the neighborhood.



LIBERTY BANK BUILDING | SOURCE: COMMUNITY ROOTS HOUSING



LIBERTY BANK BUILDING | SOURCE: MITHUN



project breakdown:

Louisiana Children's Museum

Empowering New Generations and Taking Learning Outside

Location:

City Park, New Orleans, Louisiana

Program:

56,000 sf children's museum, including exhibit wing and store; centers for literacy, parenting, early childhood research and environmental education; café; sensory and edible gardens; play hummocks; floating classroom barge; living shoreline and a brackish marsh on 8 acres.

Team:

Planning & Pre-Development

Owner: Louisiana Children's Museum

Project Development Partners: Tulane Institute of Infant and Early Childhood Mental Health; The Learning and Brain Development Lab – at Tulane

Design & Build

Owner: Louisiana Children's Museum

Owner's Representative: Vanir Construction Management

Design Architect, Landscape Architect, Interior Design: Mithun

Collaborating Architect: Waggonner & Ball Architects

Exhibit/Interpretive Design: Gyroscope, Inc.

Structural Engineer: Thornton Tomasetti

Mechanical, Electrical, Lighting Design, Plumbing,

Security, Telecom, Acoustics and AV Engineers: ARUP

Civil Engineer: Schrenk Endom Flanagan

Artists: Alex Beard, Jacques Duffourc, Mitchell Gaudet, Paul Valinski,

Fujiko Nakaya and Terrance Osborne

Operate

Facilities/O&M: Louisiana Children's Museum

Tenants: Acorn Café

Program Partners: Live Oak Wilderness Camp, Langston Hughes

Academy, First 1000 – Head Start center directors, After Class

(teacher resources)



LOUISIANA CHILDREN'S MUSEUM | SOURCE: MITHUN

project context

"This integrated planning approach has taken us on an amazing journey and will ultimately give our youngest citizens and their families a broad variety of experiences that will help build a much more resilient community—while having a lot of fun together."

—Julia Bland, LCM CEO

Supporting Children and Families

Following Hurricane Katrina, the Louisiana Children's Museum (LCM) adapted its mission to respond to the changing needs of its recovering community. By integrating indoor and outdoor interactive experiences in a park setting, LCM presents a unique model for children's museums.

Health and Well-Being through Connections with Nature

The museum's new home is distributed into two linked buildings, carefully sited to protect existing live oaks while enhancing the lagoon and open space for

environmental education. The choreography of the visitor experience connects people and nature—moving through groves of live oaks, across water and into a courtyard and sensory gardens.

Diverse Community Resources

The co-location of a two-story exhibit wing with centers for literacy, parenting, early childhood research and environmental education creates a holistic and supportive environment for families. The City Park location uniquely supports outdoor experiences and environmental education, not possible at the previous Warehouse District site.

This project serves:

Children and families of New Orleans and Louisiana



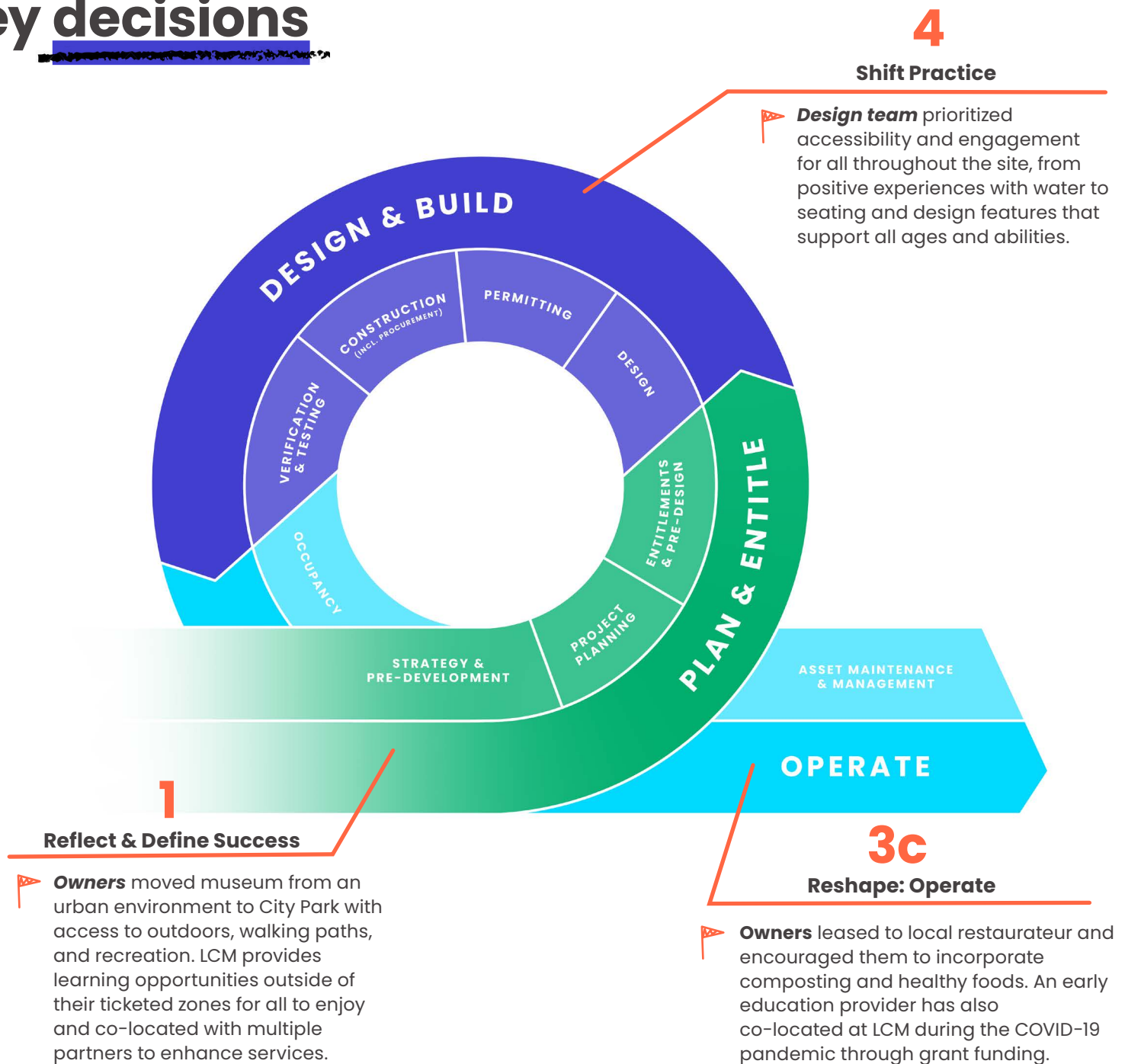
"The value of being
is being ab

Take a line for a walk.
The line is made of small pieces of paper.
It is called a line drawing.



¡Toma una línea por un paseo.
La línea está hecha de pequeños pedacitos de papel.
Se llama dibujo de línea.

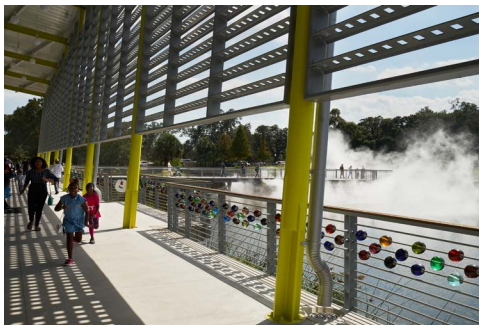
key decisions



Following Hurricane Katrina, LCM adapted its mission to respond to the changing needs of its recovering community by including integrated service centers and outdoor education in the new building to enrich the lives of children and families.

1 Reflect & Define Success

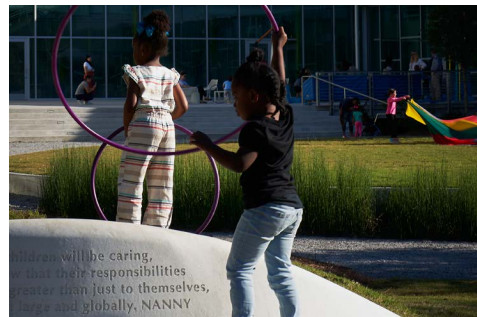
The Owner's site selection process played an important role in meeting the needs of the community recovering from Hurricane Katrina. By moving to City Park, the museum is able to provide visitors with plentiful access to nature and recreation, including multiple learning environments outside of ticketed zones and co-location of key partners to enhance services for children and families.



LOUISIANA CHILDREN'S MUSEUM |
SOURCE: MITHUN

4 Shift Practice

The design team prioritized accessibility and engagement for all throughout the site and building. Positive and comfortable experiences with water are emphasized with the entry through groves of live oaks, across the lagoon and into a courtyard and sensory gardens. All ages and abilities design is featured throughout with 'kindows' and a bench that combines multi-generational ergonomics with its parametric design.



3 Reshape: Operate

Owner's leased to a local restaurateur, Acorn Cafe, and encouraged them to incorporate composting and healthy food choices.

During the COVID-19 pandemic, the Langston Hughes Academy early learning has co-located at the museum through grant funding and provides an important support for children and caregivers.



project breakdown:

Aria Denver

Location:

Denver, Colorado

Program:

17.5-acre site, over 400 residential units, 72 affordable apartment units and 13 townhomes, 28 for-sale cohousing condominium units for sale, on-site community garden, an indoor recreation space and bike storage

Team:

Planning & Pre-Development

Developer: Susan Powers, Urban Ventures LLC and Perry Rose LLC

Design & Build

Design Team:

Oz Architecture, Michelle Kaufman Studio, Humphries Poli Architects, Wenk Associates, Enayat Schneider Engineering, MDP Engineering, Vision Land
Contractor: Palace Construction

Operate

Nonprofit Operations Partners: Frontline Farmers, Groundwork Denver

Frontline Farmers <https://www.frontlinefarming.org/>

Groundwork Denver <https://groundworkcolorado.org/>



ARIA DENVER | SOURCE: WENK ASSOCIATES

project context

This health-focused master plan transforms a former convent site into a mixed-use, multi-generational community, including new and preserved historic buildings. Cultivate Health initiative includes neighborhood-wide partners.

Vibrant Infill Community

Aria Denver is a mixed-use, mixed-income redevelopment on a 17.5-acre site that was home to the Marycrest Convent in Northwest Denver, Colorado. The project will reinvigorate the neighborhood with a commercial center, student housing and approximately 370 units of townhomes, apartments and cohousing.

Cultivating Connections

The site plan is developed around the idea of “pocket neighborhoods” whereby common spaces are neither private (back yard) nor public (a busy street) and the residents surrounding the common spaces share in its care and oversight, enhancing the security and identity of the community. The design includes over two acres of community gardens, urban agricultural use and park open space. Private streets within the community are narrow and designed to place an emphasis on use, bicycle safety and neighborhood interaction.

More than Neighbors

The goal of Aria Denver is to be a model for sustainable development that will support neighborhood revitalization in the surrounding area. The developer sought partnerships with unusual entities to achieve the project vision. Centered on the neighborhood, the Cultivate Health initiative includes Regis University, Aria Denver and surrounding neighborhoods.

The Cultivate Health initiative is centered around three focus areas: active lifestyle, healthy eating and health care, inspire design, development and community-wide programming. A Healthy-Living Coordinator helps support a range of programs, access to healthcare and community events to benefit everyone.

This project serves:

450 households in this master-planned community and cultivates health in the surrounding neighborhood

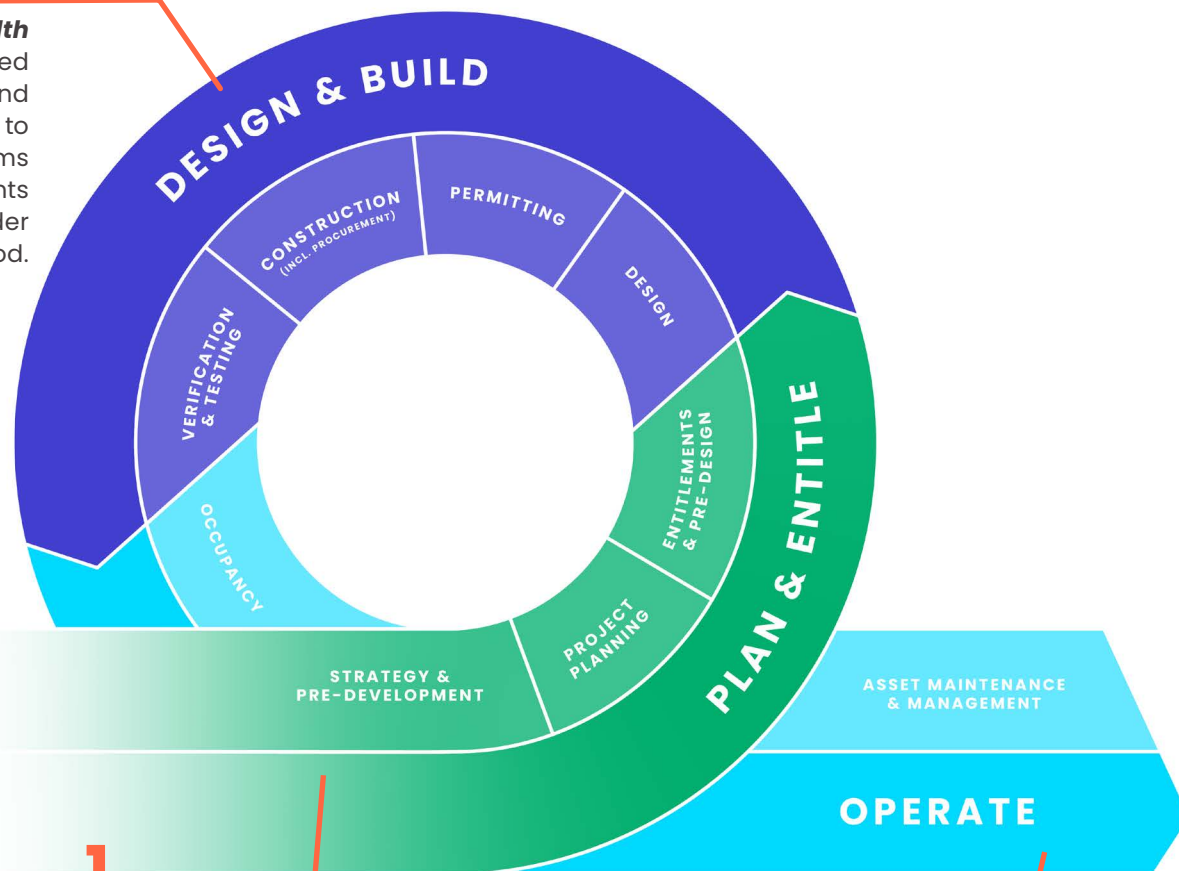


key decisions

3b

Reshape: Design & Build

Cultivate Health partnership was formed with organizations beyond the development to coordinate programs benefiting residents and the broader neighborhood.



1 Reflect & Define Success

The Developer prioritized community health as a project focus and created a charter early to define goals and attract partners.

4

Shift Practice

Facilities managers tune programs to align with racial and cultural groups.

"One of the lessons learned here is that if you don't have champions, nothing happens."

—Susan Powers, Urban Ventures LLC

1 Reflect & Define Success

The Developer prioritized community health as a project focus and created a charter early to define the vision. Principles included promote community health, be a mixed-income community, include residents of all ages, offer a variety of housing types, engage the broader neighborhood, and be a steward of the environment. Defining a mission is not typical for market-rate development and attracted investment partners with similar values.



ARIA DENVER | SOURCE: URBAN VENTURES LLC

3b Reshape: Design & Build

An initiative called **Cultivate Health** was formed during the design and construction phase. This is a partnership among Regis University, Aria Denver and surrounding neighborhoods funded by the Colorado Health Foundation. This initiative included the development residents, but went beyond to support the well-being of residents in the broader neighborhood.



4 Shift Practice

Facilities managers paid close attention to different racial and cultural groups to tailor programs and engagement. Having a clear charter and principles can inform day-to-day decisions in this mixed-income, multi-generational community.



project breakdown:

D.C. Public Schools

Design for Student Success: A school district's portfolio approach to facility design and programming for student and school community health and well-being.

Location:

Washington, D.C.

Program:

Four, K-12 schools

Team:

Planning & Pre-Development

Owner: Andrea Swiatocha Deputy Chief of Facilities, DC Public Schools

Project Team: DCPS Facilities, Food & Nutrition, Health & PE, Health Services, Sustainability, and DCPS School Leadership

Consultants: DC Department of General Services (DGS), GHP

Designers: Perkins Eastman DC, Cox Graae + Spack Architects, R. McGhee & Associates



D.C. PUBLIC SCHOOLS | SOURCE: PERKINS EASTMAN DC

project context

"At the end of the day, that's what a school is built for ... It is for students to learn and to grow. I think we as facilities can do our part to help support that. To make sure that the built environment is setting them up for success."

—**Andrea Swiatocha**, DCPS Deputy Chief of Facilities

A new Planning Process Centering Health

In 2018, Andrea Swiatocha, Deputy Chief of Facilities at D.C. Public Schools (DCPS), worked with DCPS leadership to implement use of the LEED Health Process pilot credit to guide school modernization projects throughout the DCPS portfolio.

Student, Staff and Community Health

By applying the health process at the portfolio scale, the DCPS Facilities team was able to identify and work with internal health experts, including DCPS Health Services, Health & P.E. and Food & Nutrition teams to promote student, staff and community population health and well-being through the design, construction and operations of multiple schools undergoing modernization.

This project serves:

The four schools will serve over 2,100 K-12 students and staff members in four unique neighborhoods in Washington, D.C.

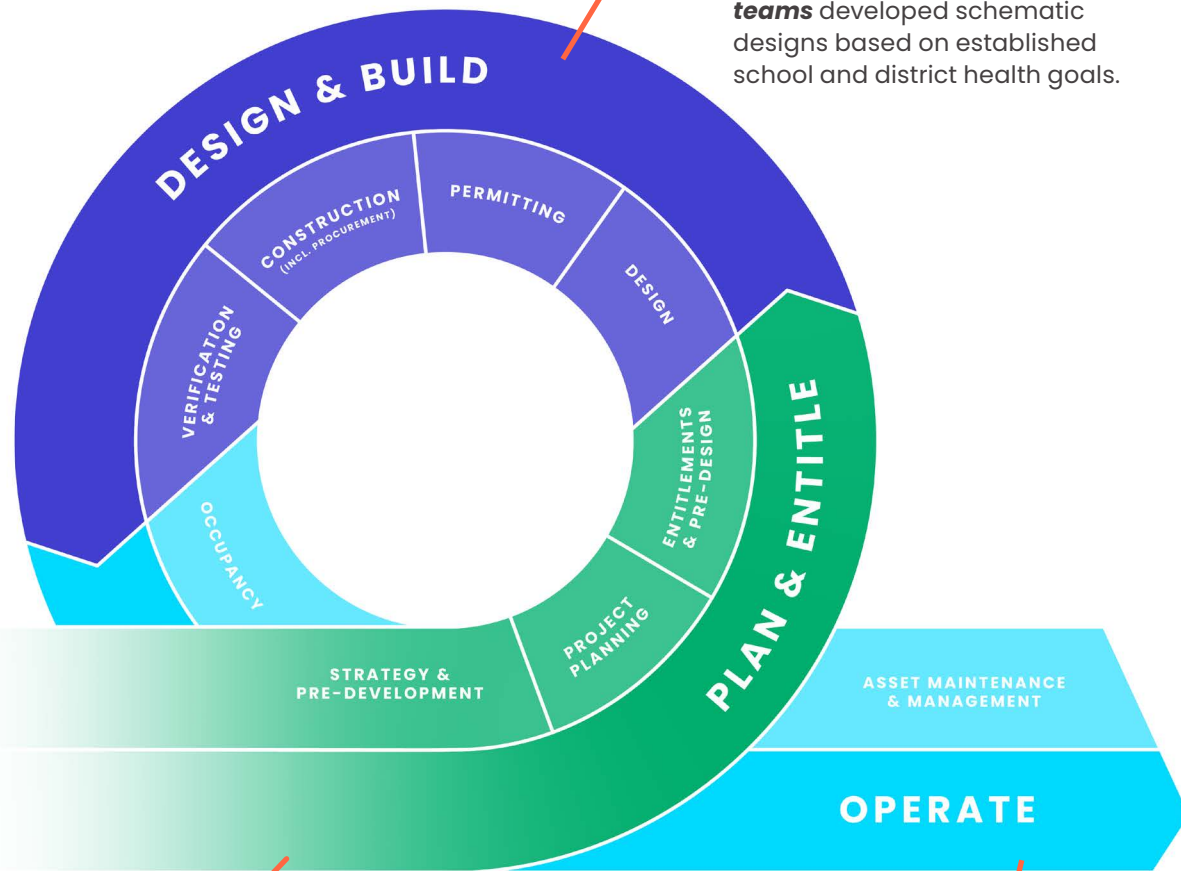


key decisions

3b

Reshape: Design & Build

Informed by DCPS **health experts** and workshops, **design teams** developed schematic designs based on established school and district health goals.



1

Reflect & Define Success

DCPS established health as an explicit goal of school modernizations across their portfolio and specified health requirements within individual RFPs.

5

Share & Learn

To inform school programming and operations strategies, DCPS will deploy a survey-based monitoring and evaluation system.

1 Reflect & Define Success

DCPS established health as an explicit goal of school modernizations across their portfolio and specified health requirements within individual RFPs. This organizational policy triggers consistent and ongoing consideration of health within facility modernizations. When assembling stakeholders on the owner's side, DCPS Facilities looked to internal health services, food and nutrition, health and physical education and sustainability teams that already were familiar with the health needs of the student population. These professionals were able to provide the project team with relevant public health data to shape DCPS's health goals and inform creation of community health profiles for each school. Sharing perspectives from a variety of internal teams helped drive an innovative discussion on the best ways to promote health at the schools.



D.C. PUBLIC SCHOOLS | SOURCE: DCPS

3b Reshape: Design & Build

Using what they learned from internal health experts and community needs assessments, each of the design teams engaged by DCPS developed schematic project designs for the four schools based on the specific needs of the population at each school.

The design teams worked with DCPS Facilities and health experts to assess hardware strategies or the healthy and equitable physical features of the school. They also assessed software strategies, the associated programming made available to students to support design features.



D.C. PUBLIC SCHOOLS |
SOURCE: R. MCGHEE & ASSOCIATES

5 Share & Learn

To help shape an operations strategy for each of the four schools, DCPS considered monitoring and evaluation strategies throughout the project development timeline, particularly during both goal-setting and design workshops, with the expectation that their decisions will have a measurable impact on health and well-being when the schools open.

Monitoring strategies can reveal how the buildings influence perceptions about sustainability and health, as well as behaviors related to the school's health goals. Ongoing monitoring also ensures that health-oriented design features are performing as intended and allows the facility management team to make adjustments if necessary.



D.C. PUBLIC SCHOOLS | SOURCE: DCPS

project breakdown:

Sun Valley EcoDistrict

Convergence and Innovation: A healthy living community in Denver's Sun Valley neighborhood

Location:

Denver, Colorado

Program:

The Sun Valley Revitalization Plan envisions a holistic community that will support existing residents and welcome new neighbors with over 3,000 new homes, 300 jobs, services, parks, gardens and community spaces, including a commercial corridor, business incubator/maker space district, job training center and food production hub, commercial urban farm, riverfront park and district infrastructure systems.

Team:

Planning & Pre-Development

Developer/Owner: Denver Housing Authority

Master Planning & Health Action Plan: Mithun

Master Plan Consultants: Design Workshop, Perspective3, Wenk Associates, Wilson & Company, YR&G, Puttman Infrastructure, EPS, Parsons Brinkerhoff, Mosaic Urban Partners, Livable Cities Studio; Rodolfo Rodríguez: Health Ecosystem Consultant, Local Community Leader

Asnake Deferse, Lisa Saenz, and Fatuma Yusef:

Sun Valley Community Connectors (CCs), culturally-based Denver Housing Authority (DHA) employees

Renee Martinez-Stone: West Denver Renaissance Collaborative Initiative Director

Partners: Sun Valley EcoDistrict Trust, Enterprise Community Partners, EPA, NRDC, Denver Public Health, UC Denver, Metro State, Urban Ventures LLC

Design & Build

Phase 3 SOL project A & E Consultants: Studio 646 Architecture, Energetics

Operate

DHA Property Management & Peoples Team

project context

A Choice Neighborhoods Transformation and Healthy Living Initiative Action Plan support the inclusive growth of an isolated neighborhood into a mixed-income, health-focused community.

A disconnected street grid and concentrated poverty isolate Sun Valley from economic opportunity and area amenities, creating one of the lowest income neighborhoods in Denver with 80% of residents living in poverty.

Innovation Hub

Sun Valley has formed an EcoDistrict to implement equitable, high-performance redevelopment in the poorest census tract in the state. The Choice Neighborhoods Transformation significantly expands housing choices, adds progressive district infrastructure and supports microbusiness in a new Maker District.

Family and Healthy Living

A focus around youth includes family-friendly housing surrounding the elementary school. A new riverfront park, South Platte River trail access, and gardens will welcome a vibrant and diverse community. The Healthy Living Action Plan and Design Guidelines leverage health research and resident experience to support social cohesion, healthy mind, daily active living and health equity outcomes.

Food Destination and Rapid Implementation

Sun Valley's unique history of food production lives on with a commercial urban farm and food production facility. An international healthy food market will attract residents and visitors alike. The Action Plan helped secure a highly competitive \$30 million Choice Neighborhoods Implementation Grant, which will accelerate implementation of this significant mixed-income redevelopment.

This project serves:

People who live work in and visit Sun Valley, one of the most culturally diverse places in Denver. The community is made up of fewer than 1,500 residents – about 50% children under 18 and over 30 languages spoken with a large population of immigrants and refugees who may have experienced trauma from violence.

The redevelopment was prompted to provide new homes for the existing 333 families living in public housing and in poverty, to welcome additional people with both market rate and income qualified homes and to support the local Sun Valley community organizations, businesses and aligned service providers that support them.

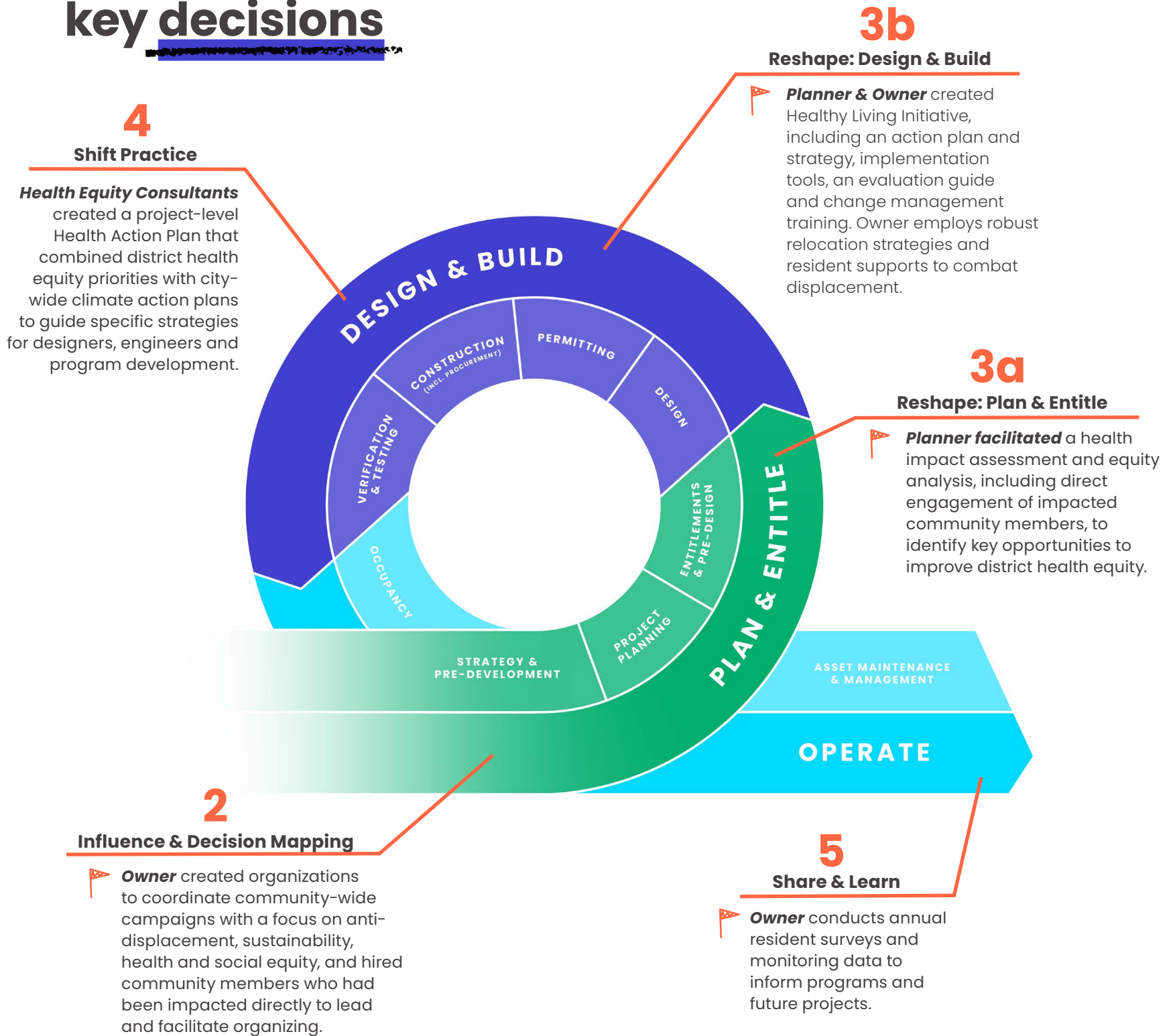


SUN VALLEY RESIDENTS | SOURCE: RODOLFO RODRÍGUEZ:

"We're not being displaced and we're not being gentrified. Every part of the city is being redeveloped, and it's about time Sun Valley got pushed forward."

-Lisa Saenz, Sun Valley Resident and Community Connector

key decisions



2 Influence & Decision Mapping

Owner created new organizations including affiliated non-profits to coordinate community-wide anti-displacement, sustainability, health and social equity campaigns beyond the project, including the Sun Valley EcoDistrict and the West Denver Renaissance Collaborative.

Owner hired community members who had been impacted directly (public housing residents) to lead and facilitate organizing and to conduct on-the-ground planning activities.



SUN VALLEY ECODISTRICT | SOURCE: WEST DENVER RENAISSANCE COLLECTIVE

3 Reshape: Plan & Design

Planner spearheaded a health impact assessment with the public health department, including equity analysis by race, age and immigration status, to identify key opportunities for health equity through district redevelopment. Key priorities identified through direct community engagement were used as the basis to focus responsive design and programming decisions, with the campaigns Safe & Inclusive, Healthy & Active, Pause & Connect and Opportunity for All.

Planner and Owner developed the Sun Valley Healthy Living Initiative to integrate health equity into design, development, and operations. Comprised of a Health Action Plan and strategy, Design Guidelines and model RFP language, an Evaluation Guide, it culminated in change management training for Owner's real estate department, people team, and property management group.



SUN VALLEY ECODISTRICT | SOURCE: MITHUN

4 Shift Practice

5 Share & Learn

Health Equity Designers created a project-level Health Action Plan combining district health equity campaigns with city-wide climate action plans to focus project design on strategies for mental, respiratory, and cardiovascular health, reducing toxics, and economic opportunities.

Owner has operationalized regular evaluations to report to funders and help shape projects and programs. The owner has a public health professional as part of the real estate department to help align activities during project delivery. Owner coordinates between real estate, the people team and property management to collect qualitative and quantitative data, including annual tenant surveys.

Partnerships with organizations including University of Colorado Denver and the regional EPA help to sustain the conducting and analyzing of survey and monitoring data.



SUN VALLEY ECODISTRICT | SOURCE: MITHUN

project breakdown:

Schuylkill Yards

Reshaping a City: Based on historic Philadelphia values of invention and equity, this 14-acre neighborhood is designed for connectivity, productivity, health and happiness.

Location:

West Philadelphia, PA

Program:

326 residential units, 20,000 SF of life science and innovative office space, 9,000 SF of retail shops and indoor and outdoor amenity spaces

Team:

Planning & Pre-Development:

Land Owner: Drexel University

Master Developer: Brandywine Realty Trust

Community Partners: Powelton Village Civic Association, Mantua Civic Association, Mt. Vernon Manor Community Development Corporation, Peoples Emergency Center Community Development Corporation, Centennial Parkside Community Development Corporation

Design & Build:

Designers: SHoP Architects and West 8 Landscape Architecture (master plan and public realm plan including the signature Drexel Square); Practice for Architecture and Urbanism (1.3 MM SF JFK East and West mixed use towers); Kieran Timberlake (280,000 SF historically sensitive adaptive re-use of the Bulletin Building); Gensler (500,000 SF purpose-built life science development)

Operate:

Program partners: The Enterprise Center (small, minority business lending program and COVID-19 fund); Construction Apprentice Preparatory Program (CAPP) (apprentice program partner)



SCKUYLKILL YARDS | SOURCE: KEITH FLEDDERMAN, BRANDYWINE REALTY TRUST

project context

"Because of CAPP (Brandywine's apprentice program), I've worked in places I never thought I could ... the 76ers locker room, the Philadelphia Museum of Art, the Wells Fargo Center, the Naval Yard, the Ronald McDonald House ... this career has taken me places I didn't think I could go." — **Jamal Byrd Construction Apprentice Preparatory Program graduate and instructor**

An Urban Master Plan

Schuylkill Yards is a 14-acre master plan undergoing development in West Philadelphia, PA. The project, located between one of the busiest transit hubs in the country and Philly's University City, will be a mixed-use community of parks, housing, workspaces, healthcare, academia and businesses.

Building and Supporting the Community

By engaging the surrounding Philadelphia community, Brandywine was able to identify some of the most pressing health and equity concerns for the neighborhood - most notably, gentrification and displacement, employment opportunities and support of neighborhood businesses.

Schuylkill Yards is being developed with programs to address those issues and also will be providing assistance for minority-owned small businesses, funding for affordable housing and housing preservation and job creation.

This project serves:

The Schuylkill Yards mixed-use development will connect Center City's established business district with University City's population of over 44,000 students, transit lines, tech companies and hospitals. The project specifically serves as a gateway to Drexel University's campus and as a bridge between the adjacent Powelton Village and Mantua neighborhoods to the 30th Street Station transit hub.



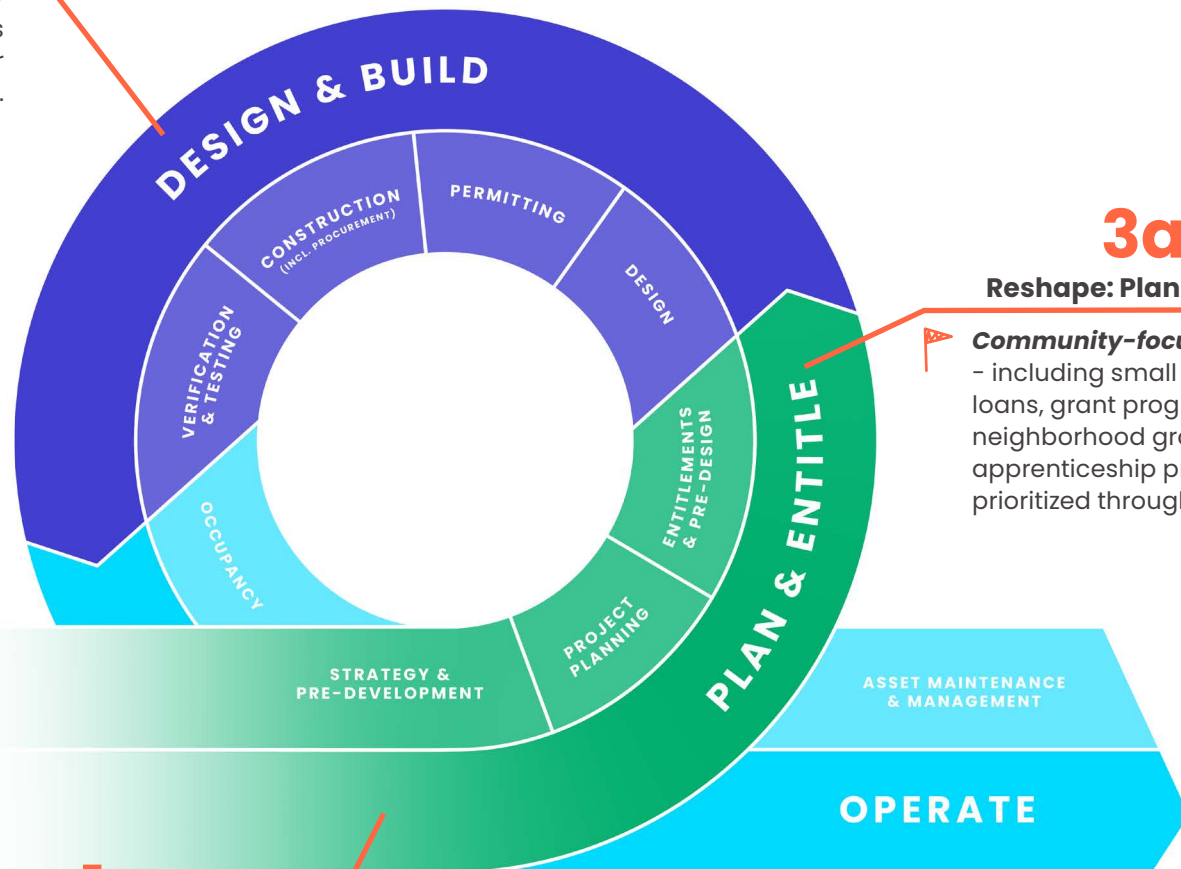
SCKUYLKILL YARDS | SOURCE: KEITH FLEDDERMAN, BRANDYWINE REALTY TRUST

key decisions

4

Shift Practice

Contractors use apprentices to diversify trades and tenants receive incentives for local purchasing.



3a

Reshape: Plan & Entitle

Community-focused financing - including small business loans, grant programs for local neighborhood groups and apprenticeship programs - was prioritized throughout the project.

Reflect & Define Success

As a proactive approach to address community concerns, Brandywine launched a voluntary economic development and community engagement effort in conjunction with the project's zoning and approvals process, resulting in a formal Community Benefits Agreement.

1 Reflect & Define Success

Intensive community engagement, beginning in the approvals process, helped the Brandywine team identify some of the most pressing concerns of the neighborhood.

The main issues the team identified were displacement, funding for minority businesses and job opportunities for community members. The area, historically populated by people of color, has been a target of for-profit development.

Engaging the community has contributed to efforts to build specifically for the economic benefit of the people who were threatened by displacement. Community engagement at such an early stage of development helped shape the project to benefit the people who would be living, working, learning and playing around the neighborhood. These efforts are guided and held accountable by a community benefit

3a Reshape: Plan & Entitle

agreement. Economic development was an explicit goal of the Schuylkill Yards project, although health and well-being were not.

Community-focused financing was introduced during project pre-development and project approval processes to ensure that such financing was incorporated throughout the life cycle of the project. In addition to a direct grant program for local community groups, Brandywine engages with a West Philadelphia-based community development corporation (CDC) on every Schuylkill Yards project, with the goal of funneling support back into the neighborhood.

The Brandywine team chose to help bolster economic development for the neighborhood, which in turn increases health, well-being and equity outcomes for the community and increases the value of the project assets.

4 Shift Practice

Because Schuylkill Yards is a neighborhood-wide project, many of the building-to-building operations strategies will differ. What remains congruous throughout the project is the emphasis on workforce development, community capacity building, grants and programs.

Contractors will be asked to hire people who have gone through a Brandywine apprentice program intended to diversify trades and the industry.

Brandywine has prioritized West Philadelphia businesses for corporate spending on items that include catering and office supplies and encourages its tenants to do the same by offering to pay up to 10% of a tenant's first purchase (whether goods or services) if bought from a West Philadelphia company.



SCKUYLKILL YARDS | SOURCE: KEITH FLEDDERMAN, BRANDYWINE REALTY TRUST

project breakdown:

Waterloo Terrace

Waterloo Terrace is a 132-unit affordable housing project in North Austin that serves single adults with incomes between 30–50% the average median income in the area.

Location:

Austin, TX

Program:

1320-unit affordable housing development

Team:

Owner: Foundation Communities

Architect of Record: Forge Craft Architecture + Design

Civil Engineer: Civilitude LLC

Structural Engineer: DCI Engineers

MEP Engineer: Aptus Engineering

Landscape Architect: TBG Partners

Envelope Consultant: Acton PC

Accessibility Consultant: Contour Collective

Commissioning: Simple Payback

LEED Consultant: US EcoLogic



WATERLOO TERRACE | SOURCE: FORGE CRAFT ARCHITECTURE & DESIGN

project context

Finding a home that is financially within reach becomes harder not just for people in poverty or persons who have experienced homelessness, but working-class citizens, such as teachers, service industry professionals and those who rely on the gig economy.

Like many fast-growing cities, Austin is in the midst of an affordable housing crisis. Finding a home that financially is within reach becomes harder every year for a growing segment of the population; a segment that includes not just people in poverty or persons who have experienced homelessness, but working-class citizens such as teachers, service industry professionals and individuals who rely on the gig economy. This is doubly true for people who don't have car or who are unable to drive.

Waterloo Terrace, a 132-unit affordable housing project for single adults, is placed strategically near a growing economic hub in North Austin. Located near the high-density mixed use residential and retail development known as the Domain, St. David's Medical Center and the nearby Walnut Creek Trail, the project is positioned to provide its residents with access to job opportunities, health care and safe outdoor recreation.

Expressway, a major freeway running through North Austin. The immediate context is car dealerships, strip malls and other auto-centric uses. **Highway noise, poor air quality and a lack of pedestrian safety all created major challenges for an ownership and design team seeking to make a safe and healthy home for future residents.**

Roughly 2.5 acres, the project site is oriented east-west with the street frontage at the narrow eastern boundary. The building is positioned towards the western boundary, adjacent to a nearby greenbelt and trail.

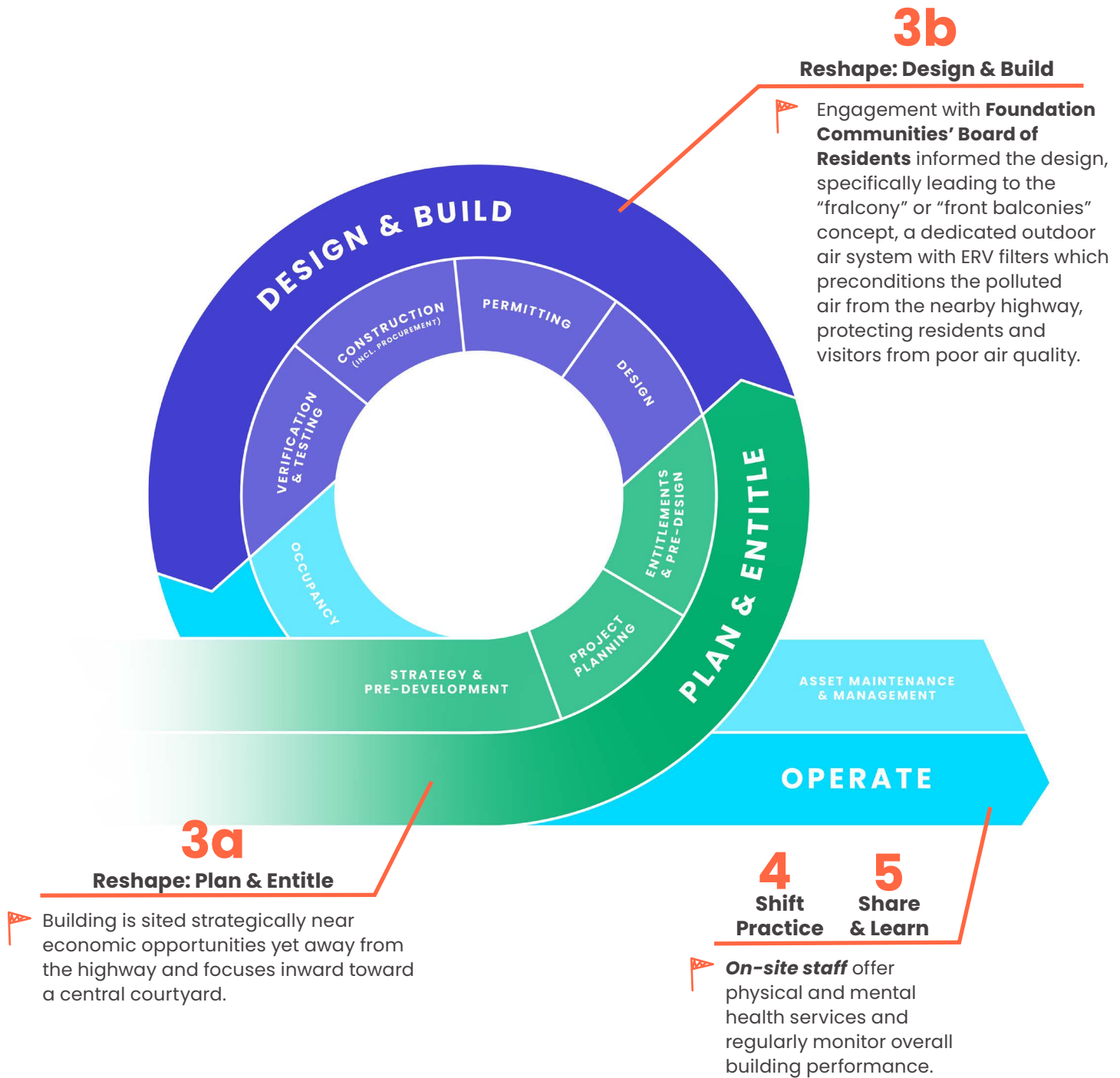
This project serves:

Single adults with incomes between 30-50% MFI



WATERLOO TERRACE | SOURCE: FORGE CRAFT ARCHITECTURE & DESIGN

key decisions



"As an affordable housing nonprofit serving this population, we are committed to improving the well-being of our residents by providing health programming right where they live and eliminating the barriers of transportation, cost and childcare."

- Foundation Communities

3a Reshape: Plan & Entitle

To address sound and safety concerns, the design team focused residential units inwards around a large, fully accessible courtyard containing active infrastructure for relaxing, gardening and socializing, and rainwater gardens that filter the stormwater from the roof.

Shared walkways are articulated by balconies that serve as front stoops for interacting with neighbors. Small windows at the entry door of each unit help strengthen this connection.

3b Reshape: Design & Build

Innovative HVAC strategies address pollution and air quality concerns. Conventional (and affordable) PTAC units handle the bulk of the heating and cooling load for each unit. A centralized, dedicated outdoor air system, paired with an energy recovery ventilator (ERV), filters and preconditions the polluted, incoming outdoor air.

Combined with a high-performing building envelope, the project enjoys the additional benefit of using only two air changes per hour (ACH), less than half of what is allowed by code.

4 Shift Practice **5** Share & Learn

Foundation Communities has provided affordable housing options to Austinites since 1990 with a large and diverse portfolio of over twenty properties in operation.

By monitoring existing facilities for energy consumption through frequent resident engagement efforts, Foundation Communities is committed to learning the good and bad from previous projects and applying those lessons to each new project.

Combined with their Healthy Living Initiatives, their team continuously aims to improve the health and well-being of residents in their communities.

project breakdown:

CineMassive at 171 Armour

Intown Industrial: Enhancing the aesthetic, cultural and historic quality of Atlanta's urban experience by providing connectivity and preserving diversity for an intown neighborhood.

Location:

Atlanta, GA

Program:

Approx 20,000 SF industrial, secure facility including assembly, research & development, showroom, and support space

Team:

Team included:

Owner: CineMassive

Developer: Gene Kansas | Commercial Real Estate

Design Team: Cognitive Design (Architecture, Interior Design),

CORE (Landscape), Flippo Civil, Stability Engineering (Structural),

Subscription Engineering (MEP)



CINEMASSIVE | SOURCE: MATTHEW FINN

project context

"CineMassive has been an intown Atlanta business since its founding in 2005. We believe that being intown gives employees access to a variety of transportation, entertainment and food options, as well as adjacency to parks and forests."

—David Minnix, Co-Founder, Chief Executive Officer CineMassive

CineMassive at 171 Armour preserves diversity and equitable access to Atlanta by reimagining the determined and purposeful optimism of the late 1950s, embodied in a mid-century industrial building, into an advanced industrial facility of today.

In metro Atlanta, 12.6% of all private-sector jobs are in goods-producing industries; only 5.9% within the City of Atlanta. Located on the Atlanta BeltLine's forthcoming Northeast Trial, CineMassive is rooted deeply in this place. Preserving industrial workers' inclusion in this neighborhood ensures equitable access to the city, strengthens diversity and makes Atlanta a better place to live, work and play.

This project serves:

Intown industrial workers and the local community through improved urban connectivity.

A diverse team for a diverse community

For an extensive rehabilitation of 171 Armour, CineMassive enlisted a collaborative team that thought holistically about the project. The team included an industrial engineer, clinical psychologist, researcher and other designers to balance CineMassive's secure operations with fostering good health and social community.

Health through daylight, nature, community, and movement

CineMassive was designed to support productivity, creativity and cognitive performance with ample daylight and nature views throughout, even from the loading dock. To facilitate time together, amenities are divided strategically amongst the company's two buildings and a new pedestrian path between them increases accessibility.

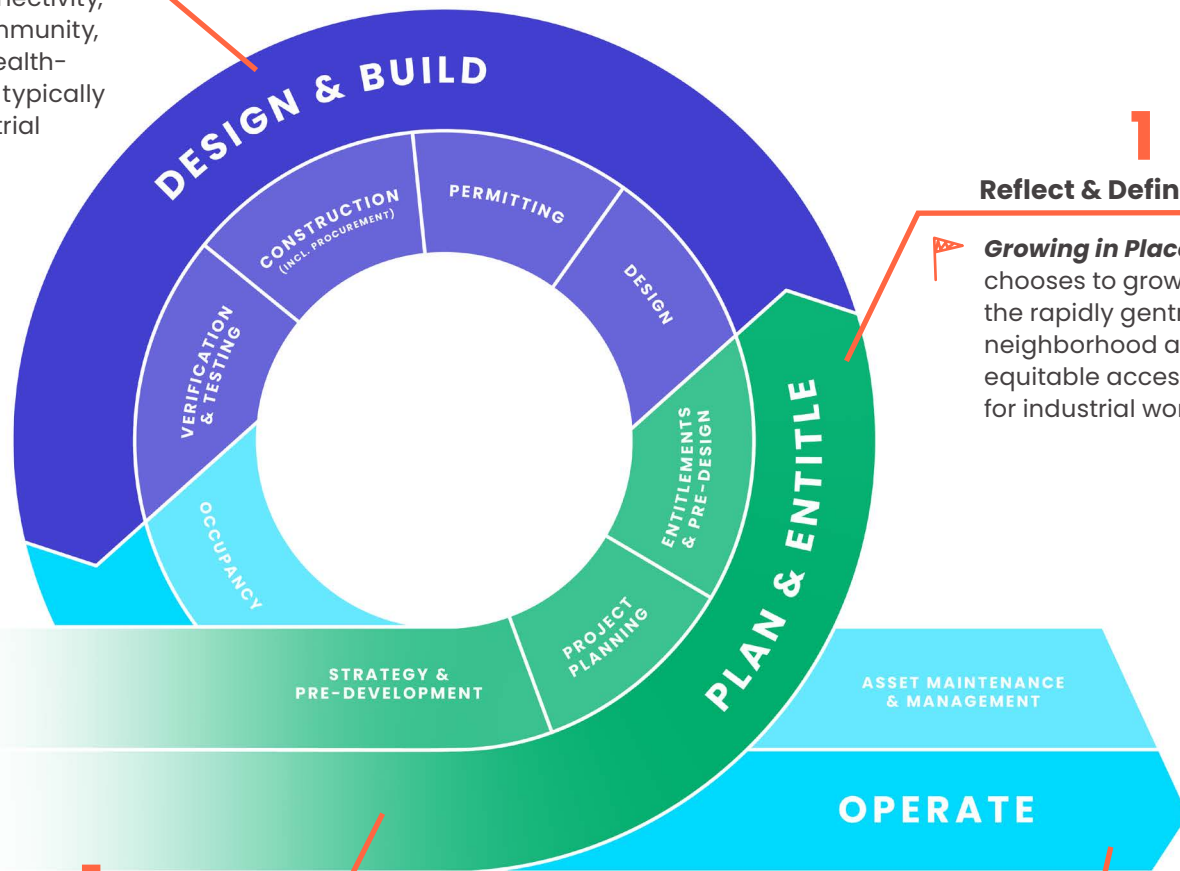


key decisions

3b

Reshape: Design & Build

Design team prioritizes improving urban connectivity, facilitating social community, and employs other health-promoting strategies typically not included in industrial workplaces.



1 Reflect & Define Success

Growing in Place: Owner chooses to grow within the rapidly gentrifying neighborhood and preserves equitable access to the City for industrial workers.

1 Reflect & Define Success

Influence of Policy: A city zoning update encourages density and in-town industrial within the City of Atlanta.

3c

Reshape: Operate

Owner identifies opportunities elsewhere within the real estate portfolio to promote equity through partnerships with local businesses.

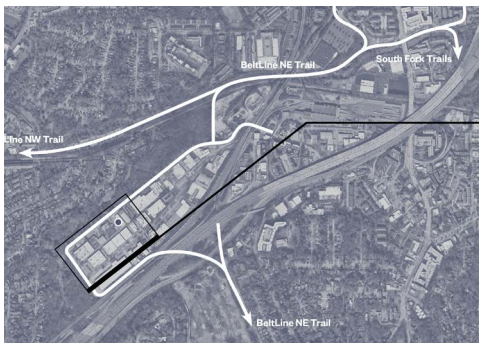
"For those who work at CineMassive and choose to live intown, employees can avoid a dangerous and stressful highway commute. Being intown offers the opportunity for a healthy, balanced lifestyle to our employees."

—David Minnix, Co-Founder, Chief Executive Officer CineMassive

1 Reflect & Define Success

When CineMassive outgrew its previous facility, the owner chose to grow within the rapidly gentrifying neighborhood and preserve equitable access to the city for industrial workers.

As part of the building's rehabilitation, several dead-end streets and parking lots were connected and new pedestrian paths were added. The result sets a precedent for improving urban connectivity.



CINEMASSIVE | SOURCE: MATTHEW FINN

3b Reshape: Design & Build

With good public transit access, this daylight industrial workplace encourages physical activity by providing bike storage, showers and electric sit-stand workstations throughout - all part of an inspired commitment to the health, common mission, goals and dreams shared by employees.



CINEMASSIVE | SOURCE: MATTHEW FINN

3c Reshape: Operate

For security reasons, Owner David Minnix promotes equity beyond CineMassive's walls. For example, CineMassive partners with a nearby shared workspace, Indie Studios, in a building Minnix also owns.

CineMassive provides technology that enables equitable access to educational and professional networking events curated by its residents (60% women-owned businesses). The events are always free, open to all and may be attended virtually or in person.



CINEMASSIVE | SOURCE: MATTHEW FINN

05 appendices

worksheets

methods

references

glossary

worksheets

influence map and critical path
decisions worksheet

capital flow worksheet

template for project breakdowns

influence map and critical path decisions worksheet

look at the diagram on the right.

When do the critical decisions occur during the project delivery process? What is the decision-making structure? Who is sitting at the table and what are the decision criteria?

Add your notes or customize the timing and critical path decisions for your own project delivery. Add key notes to a calendar and review the Strategies and Questions table.

Are there opportunities for inclusion and advancing procedural health equity in your project through broadening participation, cross-sector partnerships or shifting the timing or scope of tasks to serve as critical path inputs?

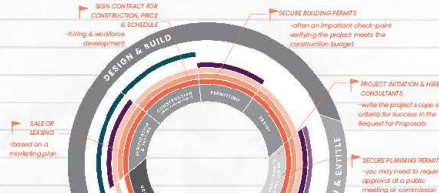
See ideas from the Action Framework resources and Project Breakdowns.



124

share your ideas, questions, etc. here >>

This diagram is a template that describes some examples of pivotal moments and decisions that are common in project delivery. It here for you to customize!



capital flow worksheet

look at the diagram on the right.

It describes some examples of financial capital flow and the role of various stakeholders that are common in real estate development.

financial People can provide **seeded capital** in many ways during project delivery. Examples include contributing their time and expertise to help understand the community, place, and identity or by contributing their relationships and social connections to find tenants or partner organizations.

environmental **Environmental capital** includes the raw materials that are necessary to construct a project, like the land itself, energy, and building materials. The environment is also affected by outputs of the project's operations and management - for example through impacts on water and air quality.

Considering these forms of capital together is known as the **triple bottom line**. See a structure for reporting performance on these three measures (Environmental, Social, and Governance).

How is value flowing between people and place as a result of your project? Consider the flow of financial, social, and environmental impacts between your project. Are social and environmental impacts being treated as 'externalities'?

Add your notes or customize the capital flows for your own project delivery. Add key notes to a calendar and review the Strategies and Questions table.

Are there unrealized opportunities for inclusive value expansion through structural health equity through broader ownership models, or a regenerative rather than extractive environmental resource flows or social capital?

See ideas from the Action Framework resources and Project Breakdowns.

122

share your ideas, questions, etc. here >>

This diagram is a template that describes some examples of financial capital flow shown as green arrows and the role of various stakeholders that are common in real estate development. It's here for you to customize!



template for project breakdowns

Use the diagram on the right to start mapping out pivotal moments in your project's lifecycle. The diagram shows some examples of a project's lifecycle and is designed to help you and your project team identify critical tasks, to promote health equity and equity. Refer to the Action Framework in section 2 of this report to review strategies and guiding questions. Use the appropriate best practices below.

action framework strategies

1. Strategy 1: Set Feet and Define Success (see guiding questions here)
2. Strategy 2: Influence and Decision Mapping (see guiding questions here)
3. Strategy 3: Reshape Project Delivery (see guiding questions here)
4. Strategy 4: Shift Practice (see guiding questions here)
5. Strategy 5: Share and Learn (see guiding questions here)

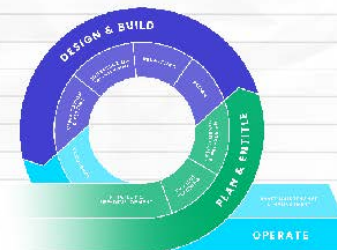
who is this project serving?

Describe the context of your project. Where is it located? What is the history of the community there? How will your project affect the community and who is it serving? (see guiding questions here)

126

share your ideas, questions, etc. here >>

This diagram is a template for you to begin mapping out when pivotal moments in plant health equity opportunities may occur through the lifecycle of your project. Use these as a starting point for your own mapping, adjusted to the Action Framework.



127

influence map and critical path decisions worksheet

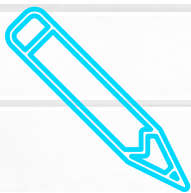
Look at the diagram on the right.

When do the critical decisions occur during the project delivery process? What is the decision-making structure? Who is sitting at the table and what are the decision criteria?

Add your notes or customize the timing and critical path decisions for your own project delivery. Add key dates to a calendar and review the Strategies and Question Guide.

Are there opportunities for inclusion and advancing procedural health equity in your project through broadening participation, cross-sector partnerships or shifting the timing or scope of tasks to serve as critical path inputs?

Seek ideas from the [Action Framework](#) resources and [Project Breakdowns](#).

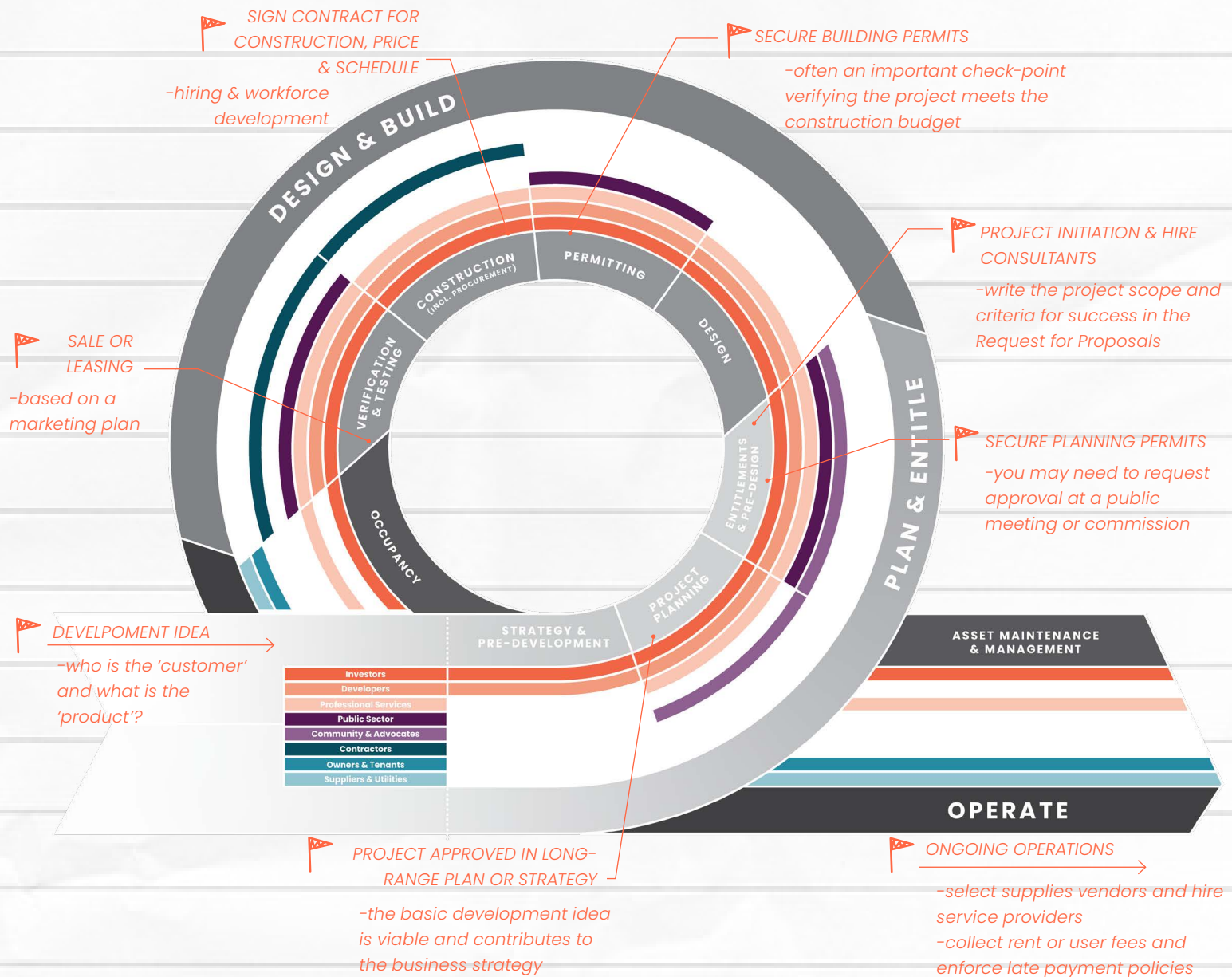


Who are our project delivery stakeholders?

Investors
Developers
Professional Services
Public Sector
Community & Advocates
Contractors
Owners & Tenants
Suppliers & Utilities

share your ideas, questions, etc. [here >>](#)

This diagram, a template that describes some examples of pivotal moments and decisions that are common in project delivery, is here for you to customize!



capital flow worksheet

Look at the diagram on the right.

It describes some examples of **financial capital** flows and the roles of various stakeholders who are common in real estate development.

financial

People may provide **social capital** in many ways during project delivery. Examples are by contributing their time and expertise to help understand the community, place and identity or by contributing their relationships and social connections to find tenants or partner organizations.

social

environmental

Environmental capital includes the raw materials that are necessary to construct a project, like the land, energy and building materials. The environment also is affected by outputs of the project's operations and management - for example through impacts on water and air quality.

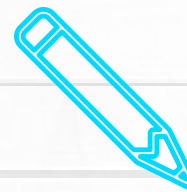
Considering the **environmental, social, and governance (ESG)** forms of capital together is known as the triple bottom line. ESG is a structure for reporting performance on these three measures.

How does value flow between people and place as a result of this project? Consider the flow of environmental, social and financial resources in your project. Are environmental and social impacts being accounted for or are they being treated as externalities?

Add your notes or customize the capital flows for your own project delivery. Add notes about the stakeholders who are capturing value through the project and review the [Strategies and Question Guide](#).

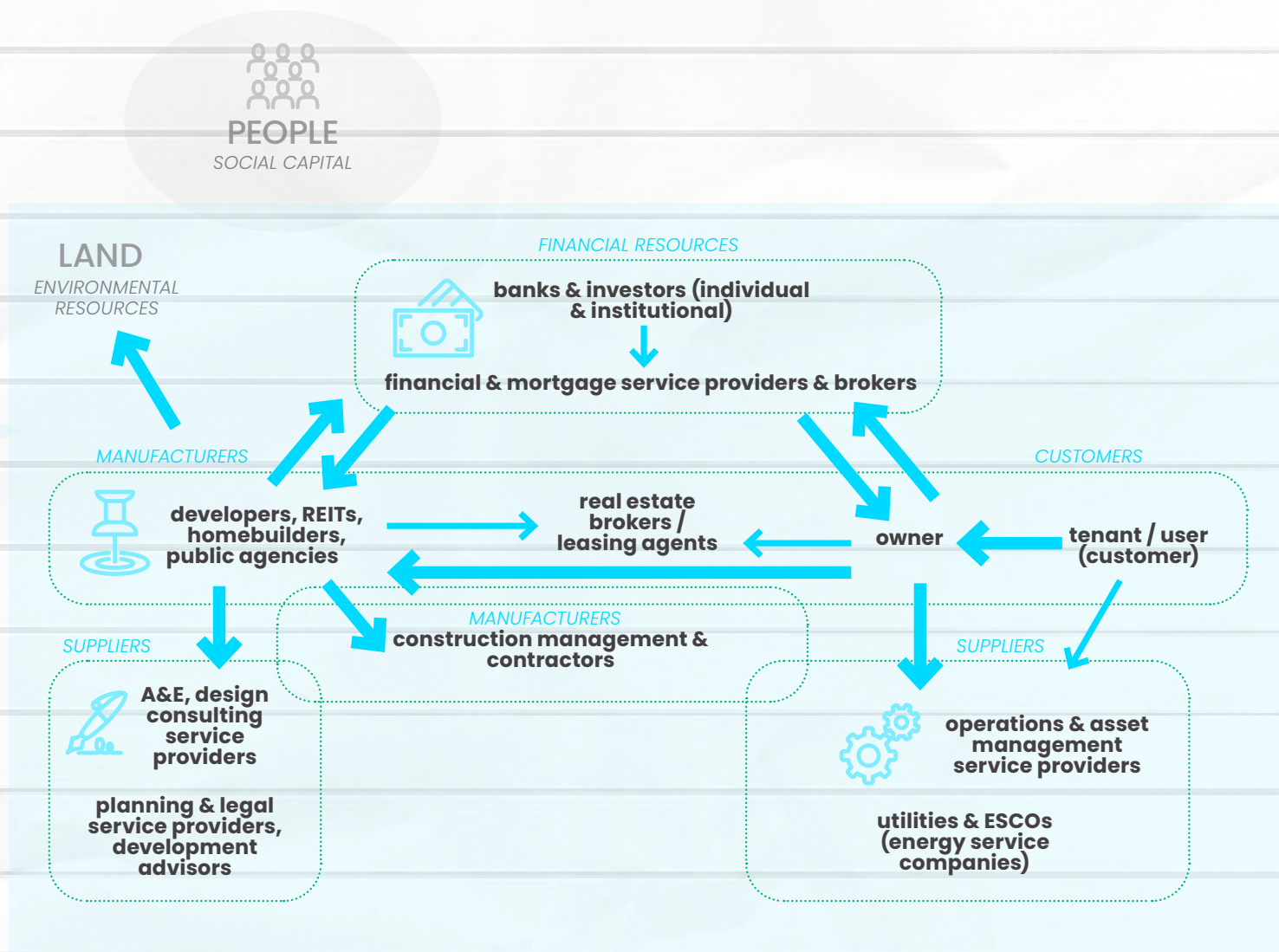
Are there unrealized opportunities for inclusive value creation and expanding structural health equity through broadened team structures, ownership models or a regenerative rather than extractive approach to environmental resource flows or social capital?

Seek ideas from the [Action Framework](#) resources and [Project Breakdowns](#).

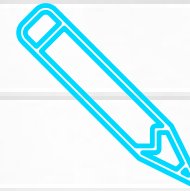


share your
ideas,
questions,
etc.
[here >>](#)

This diagram, a template describing some examples of **financial** capital flows shown as blue arrows and the roles of various stakeholders who are common in real estate development. It's here for you to customize!



template for project breakdowns



Use the diagram on the right to start mapping **pivotal moments** in your **project's life cycle**. This diagram describes typical phases of a project's life cycle and is designed to help you and your project team identify opportunities to promote health equity and inclusion.

Refer to the [Action Framework](#) in section 3 of this report to review strategies and guiding questions. **Use the space below to brainstorm ideas.**

action framework strategies

- 1. Strategy 1: Reflect and Define Success** (see guiding questions [here](#))
- 2. Strategy 2: Influence and Decision Mapping** (see guiding questions [here](#))
- 3. Strategy 3a, 3b, 3c: Reshape Project Delivery** (see guiding questions [here](#))
- 4. Strategy 4: Shift Practice** (see guiding questions [here](#))
- 5. Strategy 5: Share and Learn** (see guiding questions [here](#))

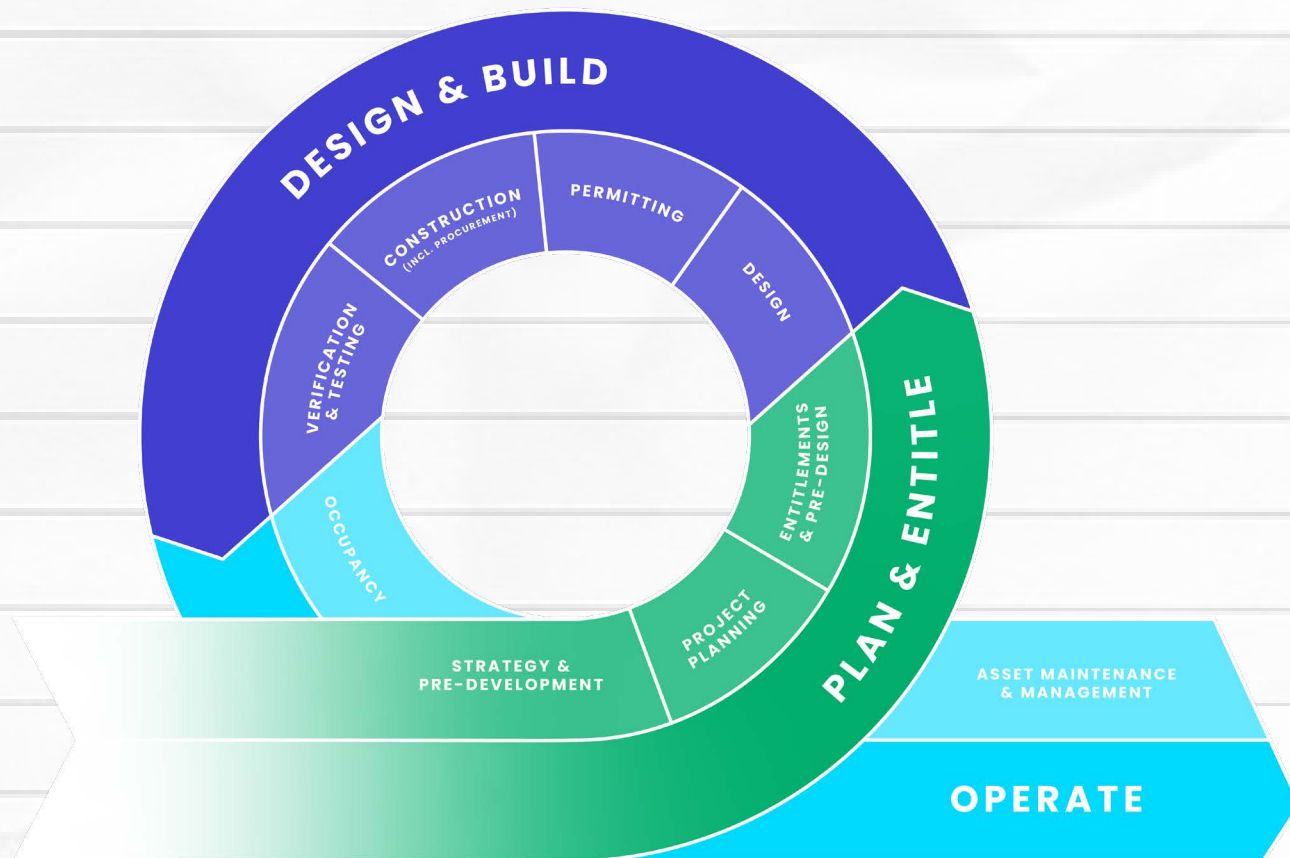
who is this project serving?

Describe the context of your project. Where is it located? What is the history of the community there? How will your project affect the community and who is it serving? (see guiding questions [here](#))

share your
ideas,
questions,
etc.
[here >>](#)



This diagram is a template for you to begin mapping when **pivotal moments to plant health equity opportunity flags** occur through the life cycle of your project. Feel free to customize as you work through strategies outlined in the [Action Framework](#).



research process and methods

"What role does the real estate industry play in perpetuating social and health inequities?"

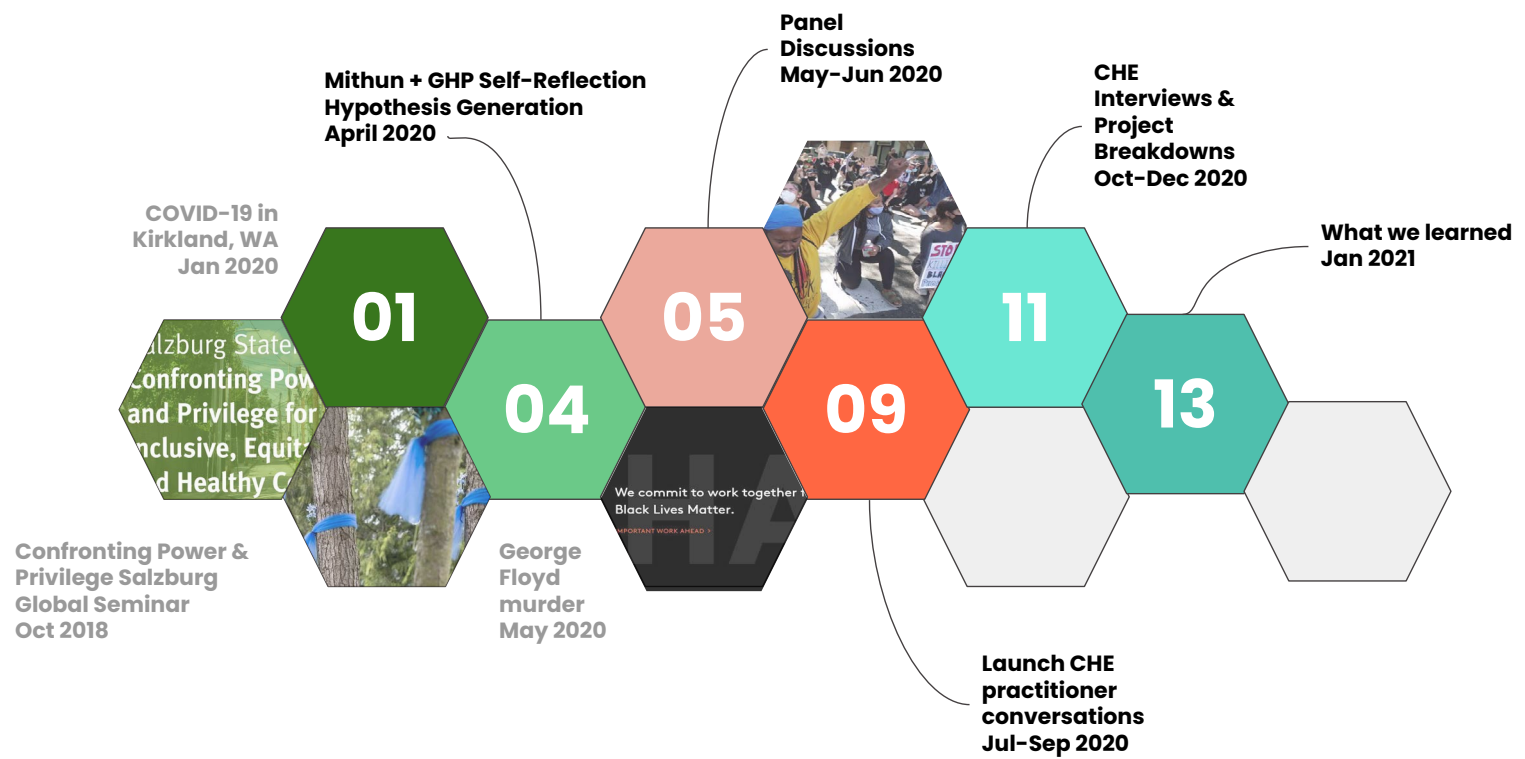
"What role might the industry play in addressing those inequities?"

"How can I, as an individual practitioner, help deliver projects that make a difference?"

We hold an unwavering belief in continual improvement. We believe in design's vital capacity to connect people to each other, and that with intention, our daily actions can lead to industry-wide change.

Over the course of nine months, we embarked on self-reflection to explore our own power and privilege within the real estate delivery cycle and generate hypotheses about how we might build back better through recovery.

We engaged in conversations with leading-edge developers, policy makers and planners, designers, contractors, property managers, sustainability and health consultants. We collaborated with academic institutions to understand real estate economics, dynamics and institutional investing. We broke down project implementation to understand decision-making, blind spots and pervasive challenges in our predominantly White-led field.



Self-reflection

As a majority White team of practitioners and researchers, we recognize that we are addressing these issues from our own positions of power and privilege.

As we approach this project, we are asking ourselves:

How can we use that power to combat racism and health inequities?

How can we challenge best practices and continue to improve?

How best can we use our skills as researchers and integrated thinkers for healing and empowerment?

Practitioner Engagement

We aim to organize this effort in a collaborative manner that elevates marginalized voices and voices of color. **This report shares findings from an initial round of practitioner engagement** driven by a self-identified convenience sampling approach.

This approach drew from Mithun and GHP's existing network and therefore has inherent limitations and is not representative of the industry as a whole, nor does it specifically elevate BIPOC voices and perspectives. However, working with a set of trusted colleagues and peers allowed us to create a working action framework to share with the broader industry for feedback and continued development.

We hope the insights and beta framework shared in this report serve as the foundation for continued collaboration to define and inspire a new community of health, well-being and equity-focused building practice. [Join our community of practice.](#)

Project Breakdowns

As part of our practitioner engagement, **we focused discussions around specific past projects to learn more about key opportunity moments**, decision makers, and other actors who played roles in advancing health equity.

We also collaborated with the University of British Columbia Sauder School of Business to delve into the macroeconomic context and systems mapping of investing for health equity. This collaborative project was called, "Collective Impact Evaluation of the Mariposa Healthy Living Initiative in Denver CO: The Role of Integrated Design and Community Development in Investment."

This report highlights many of these discussions in the previous section: [04 Project Breakdowns.](#)

references

Contributing Research and Frameworks

In addition to the long-term design and research collaboration between Mithun and GHP, these existing tools and research were formative to the beta Centering Health Equity Action Framework. They were created and influenced by the GHP and Mithun and their collaborators.

[LEED BD+C v4 Integrative Process for Health Promotion pilot credit IPp108](#)

[2020 Enterprise Green Communities Criteria Health Action Plan Criterion 1.5](#)

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World Bank. (2012). *Resilience, Equity, and Opportunity*. World Bank. <https://openknowledge.worldbank.org/handle/10986/12648> License: CC BY 3.0 IGO.

glossary

BIPOC

People who identify as Black, Indigenous, and People of Color. The term BIPOC was created in an effort to expand POC – or People of Color – to undo Native invisibility, anti-Blackness, dismantle white supremacy, and advance racial justice. This project currently uses the term BIPOC because it aligns with the National Organization of Minority Architects (NOMA) recommendations. Per NOMA Northwest, “We take this acronym to mean, colloquially, “black” and “brown” peoples represented by the African American, Native American, Latin American, Middle Eastern, and South/East Asian communities. We acknowledge that every cultural group holds their own histories, perspectives, traumas, and social/cultural experiences in relation to US history of systemic racism and “othering.” It is impossible to address them all in this one Call-to-Action. Therefore, the focus is on building bridges across a deep and persistent fissure in this country and profession: The Black/African American experience. We believe that by channeling efforts towards rooting out biases and injustices against one of the most historically disinherited and generationally traumatized communities, we – by extension – also uplift all other marginalized communities in the process (Native American/Indigenous people, POC, LGBTQIA+, Women).”

Sources: *The BIPOC Project (2021). The BIPOC Project: A Black, Indigenous, and People of Color Movement. Available online at: <https://www.thebipocproject.org/> and NOMA Northwest (2020) NOMA Northwest Call to Action. Available online at: <https://www.nomanw.org/call-to-action>.*

BIPOC-Led Initiatives

Any project, intervention, philanthropy, or movement championed and led by BIPOC individuals, groups, or organizations.

Source: *The BIPOC Project (2021). The BIPOC Project: A Black, Indigenous, and People of Color Movement. Available online at: <https://www.thebipocproject.org/>.*

BIPOC Professionals

BIPOC professionals are practitioners, subject matter experts, decision-makers, and others who identify as members of the BIPOC community.

Source: *The BIPOC Project (2021). The BIPOC Project: A Black, Indigenous, and People of Color Movement. Available online at: <https://www.thebipocproject.org/>.*

Building Codes

“Building codes specify minimum standards for the construction of buildings. The codes themselves are not legally binding. They serve, rather, as “models” for legal jurisdictions to utilize when developing statutes and regulations. The main purpose of building codes are to protect public health, safety and general welfare as they relate to the construction and occupancy of buildings and structures. The building code becomes law of a particular jurisdiction when formally enacted by the appropriate governmental or private authority.”

Source: *The Pennsylvania State University. (2021, March 11). Architectural Engineering. Penn State University Libraries. Available online at: <https://guides.libraries.psu.edu/c.php?g=388626&p=3484426>.*

Built Environment

The built environment encompasses all of the constructed physical aspects of the spaces we live, learn, work, play, and pray (e.g., homes, buildings, schools, streets, parks and open spaces, offices, places of worship, and infrastructure). The built environment has a tremendous influence on population health and well-being, education, equity, opportunity, and more.

Source: Riley RW. (2010, Oct 19). Health Starts Where We Learn. Robert Wood Johnson Foundation. Available online at: <https://www.rwjf.org/en/library/research/2010/10/health-starts-where-we-learn.html>.

Community Resilience

Community resilience is the ability of a community to use its assets to strengthen public health and healthcare systems and to improve the community's physical, behavioral, and social health to withstand, adapt to, and recover from adversity. Community resilience also relates to disaster preparedness, building social connectedness and opportunity, expanding communication, and engaging at-risk individuals.

Source: <https://www.phe.gov/Preparedness/planning/abc/Pages/community-resilience.aspx>.

Conceptual Frameworks

"A conceptual framework includes one or more formal theories (in part or whole) as well as other concepts and empirical findings from the literature. It is used to show relationships among these ideas and how they relate to the research study. Conceptual frameworks

are commonly seen in qualitative research in the social and behavioral sciences, for example, because often one theory cannot fully address the phenomena being studied."

Source: <https://academicguides.waldenu.edu/library/theory>

Design-Bid-Build Delivery Process

"In Design-Bid-Build, also known as the general contracting project delivery method, the process is linear, where one phase is completed before another phase is begun with no overlap. This is the traditional method of project delivery and has been the most widely used construction delivery method and the one with which most Owners are familiar."

Kubba S. (2017). Types of Building Contract Agreements. Handbook of Green Building Design and Construction (Second Edition). Available online at: <https://www.sciencedirect.com/book/9780128104330/handbook-of-green-building-design-and-construction>.

Entitlement

Entitlements are legal rights conveyed by approvals from governmental entities to develop a property for a certain use, intensity, building type or building placement. These can include land use, zoning, and environmental permits.

Source: <https://www.realized1031.com/>.

ESG Reporting (Environmental, Social, Governance)

ESG reporting refers to the three central factors in measuring the sustainability and societal impact of an

investment in a company or business – environmental management and sustainability, social issues, and corporate governance. ESG reporting is often used by “socially responsible investors” or investors to incorporate their values and concerns into their selection of investments instead of solely considering potential profitability or risk.

Source: <https://www.esg.adec-innovations.com/about-us/faqs/what-is-esg/>.

Externalities

“Externalities refers to situations when the effect of production or consumption of goods and services imposes costs or benefits on others which are not reflected in the prices charged for the goods and services being provided. Externalities can be both negative and positive.”

Source: <https://stats.oecd.org/glossary/detail.asp?ID=3215>.

Fiscal Policy

“Fiscal policy refers to the use of government spending and tax policies to influence economic conditions, especially macroeconomic conditions, including aggregate demand for goods and services, employment, inflation, and economic growth.”

Hayes A. (2021, Feb 24). *Fiscal Policy*. Investopedia. Available online at: <https://www.investopedia.com/terms/f/fiscalpolicy.asp#:~:text=Fiscal%20policy%20refers%20to%20the,%2C%20inflation%2C%20and%20economic%20growth>.

Framework

The ideas, information, and principles that form the structure of an organization or plan.

Source: <https://dictionary.cambridge.org/us/dictionary/english/framework>.

Health Inequities and Disparities

“Health disparities are preventable differences in the burden of disease, injury, violence, or opportunities to achieve optimal health that are experienced by socially disadvantaged populations. Populations can be defined by factors such as race or ethnicity, gender, education or income, disability, geographic location (e.g., rural or urban), or sexual orientation. Health disparities are inequitable and are directly related to the historical and current unequal distribution of social, political, economic, and environmental resources.”

Source: CDC. (2021). *Health Disparities Among Youth*. Centers for Disease Control and Prevention. Available online at: <https://tinyurl.com/4c764sjz>.

“Health disparities are the metric we use to measure progress toward achieving health equity. A reduction in health disparities (in absolute and relative terms) is evidence that we are moving toward greater health equity.”

Source: Braveman P. (2014, Jan). *What Are Health Disparities and Health Equity? We Need to Be Clear*. *Public Health Reports*. doi: 10.1177/00333549141291S203.

Intersectional Approach

Intersectionality is an analytical framework for understanding how aspects of a person's social and political identities combine to create different modes of discrimination and privilege.

Source: The term was conceptualized and coined by Kimberlé Williams Crenshaw.

Land Use Zoning

"Zoning refers to municipal or local laws or regulations that govern how real property can and cannot be used in certain geographic areas. For example, zoning laws can limit commercial or industrial use of land in order to prevent oil, manufacturing, or other types of businesses from building in residential neighborhoods."

Source: Kenton W. (2021, March 23). Zoning. Investopedia. Available online at: <https://www.investopedia.com/terms/z/zoning.asp#:~:text=Zoning%20allows%20local%20governments%20to,among%20other%20more%20specific%20designations>.

Marginalized Communities

Marginalized communities are those excluded from mainstream social, economic, educational, and/or cultural life. Examples of marginalized populations include, but are not limited to, groups excluded due to race, gender identity, sexual orientation, age, physical ability, language, and/or immigration status. Marginalization occurs due to unequal power relationships between social groups.

Source: Sevelius JM, et al. (2020, May 16). Research with Marginalized Communities: Challenges to Continuity During the COVID-19

Pandemic. Nature Public Health Emergency Collection. doi: 10.1007/s10461-020-02920-3

Mediating Factors

"A mediating variable explains the relation between the independent (predictor) and the dependent (criterion) variable. It explains how or why there is a relation between two variables. A mediator can be a potential mechanism by which an independent variable can produce changes on a dependent variable. When you fully account for the effect of the mediator, the relation between independent and dependent variables may go away. For instance, imagine that you find a positive association between note-taking and performance on an exam. This association may be explained by number of hours studying, which would be the mediating variable."

Source: <https://www.psychologyinaction.org/psychology-in-action-1/2015/02/06/mediating-and-moderating-variables-explained>.

Mitigation

Steps taken to avoid or minimize negative impacts, whether to the environment, human health, or equity.

Multi-Sector Built Environment Practitioners

Built environment practitioners include architects, engineers, urban planners, real estate developers, construction contractors, and technical consultants, and others. These practitioners typically cut across sectors and industries and fall into three categories: practitioners, policy makers, and financiers. They are

the decision makers who have influence over the built environment.

Source: Trowbridge M, Worden K, Pyke C. (2016, Nov 1). Using Green Building as a Model for Making Health Promotion Standard in the Built Environment. Health Affairs. <https://doi.org/10.1377/hlthaff.2016.1020>.

Power and Privilege

Multiple definitions for Power and Privilege are available here: Vanderbilt.edu.

Practitioners

Professionals who work in an occupation that requires specialized education, training, and/or skills.

Source: <https://www.dictionary.com/browse/practitioner>.

Project Delivery Process

Project Delivery is a comprehensive process including planning, design and construction required to execute and complete a building facility or other type of project.

Source: <https://dbia.org/wp-content/uploads/2018/05/Primers-Choosing-Delivery-Method.pdf>.

Project Lifecycle

The entire process of project delivery (planning, design and construction) as well as operations and management of the project or facility.

REITs

A real estate investment trust, or REIT, is a company that owns, operates, or finances income-producing real

estate across a range of sectors and property types including offices, apartment buildings, warehouses, retail centers, medical facilities, data centers, cell towers, infrastructure and hotels.

Source: <https://www.reit.com/what-reit#:~:text=REITs%2C%20or%20real%20estate%20investment,number%20of%20benefits%20to%20investors>.

Shareholders

A shareholder is any person, institution or company that has ownership of at least one share of a company's stocks, also referred to as equity. Also known as stockholders, such entities are partial owners of a company and are entitled to a share in the profits that the said company generates.

Source: <https://www.realized1031.com/>.

Social Inclusion

Social inclusion is defined as the process of improving the terms of participation in society, particularly for people who are disadvantaged, through enhancing opportunities, access to resources, voice, and respect for rights.

Source: <https://www.un.org/esa/socdev/rwss/2016/chapter1.pdf>.

Sustainable Development Goals

The Sustainable Development Goals (SDGs) are a collection of 17 interlinked global goals designed to be a "blueprint to achieve a better and more sustainable future for all". The SDGs were set up in 2015 by the United

Nations General Assembly and are intended to be achieved by the year 2030.

Source: United Nations (2015). The 17 Goals. United Nations Department of Economic and Social Affairs. Available online at: <https://sdgs.un.org/goals>.

Triple Bottom Line (TBL)

“The triple bottom line is a transformation framework for businesses and other organizations to help them move toward a regenerative and more sustainable future. Triple bottom line theory expands business success metrics from solely financial to include contributions to environmental health, social well-being, and a just economy. These bottom-line categories are often referred to as the three Ps: people, planet, and prosperity.”

Source: <https://sustain.wisconsin.edu/sustainability/triple-bottom-line/>.

White Privilege

White privilege is about the concrete benefits of access to resources and social rewards and the power to shape the norms and values of society that whites receive, unconsciously or consciously, by virtue of their skin color in a racist society.

Source: Potapchuk, M. (2005). Flipping the Script: White Privilege and Community Building. MP Associates, Inc. ; The Center for Assessment and Policy Development (CAPD). Available online at: <http://www.mpassociates.us/uploads/3/7/1/0/37103967/flippingthescriptmostupdated.pdf>.

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greenhealthpartnership.org—

CenteringEquity.org