How Real Estate Developers Define and Implement Their Social Impact Goals through the Real Estate Development Process

by

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B.S., Architecture, 2016

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Submitted to the Program in real estate Development in Conjunction with the Center for Real Estate in Partial Fulfillment of the Requirements for the Degree of Master of Science in Real Estate Development

at the

Massachusetts Institute of Technology

February, 2020

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ABSTRACT

As one of the largest industries in the world, real estate, has tremendous amount of impact in shaping cities, communities, and individuals. Now more than ever, we are facing major crises such as environmental injustice, housing shortages, increasing wealth gaps, and the displacement of middle and low income individuals from the heart of the city. We as people, investors, policy makers, and developers need to be extraordinarily more conscious about the impact we make in the built environment.

This thesis will first explore the current context of social impact in the real estate sector, and outline the type and depth of impact real estate plays a role in. We will also review what resources, goals, and metrics are the standard for impact in real estate. Through recent reports and literature, we will discuss the major influences shaping social impact in real estate, and where the industry, as a whole, currently stands.

This thesis will then look to real estate developers who are actively considering their social impact as they develop. Through a series of interviews, and a goal – setting framework we will understand how these developers set goals, and implement said goals throughout the development process. Each of these developers will also explain how they measure the success of the goals, and how their organization compares to the rest of the industry.

Through the literature review and interviews we will analyze if there is a shared definition for social impact in real estate and what is the optimal development process to ensure the greatest amount of positive impact. Through this analysis we will also layout the key considerations and opportunities all developers should be aware in order to shift the sector to create the greatest amount of positive impact.

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Acknowledgements

To my thesis advisor, Kate Martin Mytty, for her constant support and encouragement through my research process, and entire time at MIT. Kate's insights and creativity have encouraged me to think differently which has forever changed by personal and professional path.

To everyone who took time to discuss their professional journeys and thoughts on the industry. Their stories were critical in the writing of this thesis.

To my Cambridge family, especially my roommates. Thank you for infinite amounts of happiness and laughter. I will forever cherish our moments.

To my sisters, Christine and Samantha, and my brother in-law, Adam, for their unconditional love and being the greatest support system.

To my mom, Asma Abi-Hanna Zaccack, and dad, Joseph Saliba Zaccack, for giving me the world and more. Every ounce of my grit stems from their journey immigrating from Lebanon to the creating a home in the United States.

To God for blessing me endlessly and teaching me the most important lesson of life: love your neighbor as yourself.

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Chapter One: The Social Impact of Real Estate Development: An Introduction

Every single real estate development project has a social impact on society. Although these impacts are intrinsic to the industry, there is less focus from the sector on recognizing these impacts as a key outcome of the development process. In the same regard, the real estate industry is still in the early development phase of setting metrics and measuring the impacts. Without these structured measurements, it is challenging to hold developers and investors accountable for their social impacts—and to understand the critical factors that real estate can influence proactively. Understanding the impacts of real estate on communities is a crucial issue for policymakers, as they are the agents tasked to protect their constituents while furthering economic growth. Most importantly, the humans impacted by real estate, have the right to hold the organizations responsible for their real developments, and protect themselves against negative impacts from any future development.

The arena of social impact in general, and specifically in real estate, is a very complex, early-stage, and at times, a subjective topic. This thesis will use existing literature of industry reports, existing and newly developed frameworks, and interviews translated into qualitative and quantitative data to answer the main question: how can real estate developers use the real estate development process to create POSITIVE social impact successfully? Answering this main question also requires exploring several sub-questions, including What is the definition of social impact in real estate? How are real estate developers currently integrating social impact values into their development projects? (Maybe) How is the real estate industry measuring social impact?

As social value is in many ways in the eyes of the beholder, and will very much vary depending on location, timing, and specific needs of the community this paper will set the following parameter: Positive social value is focused on groups most in need and under-represented to maximize equity within society.

This thesis is particularly topical as our society is facing major crises such as global warming, housing shortages, and displacement of the middle and lower class from the heart of the city. Now more than ever, we as people and developers need to be extraordinarily conscious about the impact we make in the built environment. Also, a rise in environmental, social, and governance (ESG) Funds, "Corporate Responsibility" and New Market Tax Incentives, means investors in the real estate industry are also increasingly pressed to measure not just the economic returns of projects, but also the social returns. Lastly, millennials and generation Z have tremendous purchasing power, and data has shown this population cares about corporate social responsibility more than ever before. As developers build companies and brands targeting this new generation, it will be essential to prove a positive social reputation with continued efforts to maintain sustainable development.

This thesis focuses on how developers working on active development projects define and create social impact. As developers interact with many other partners, including investors, public agencies, and the public, other stakeholders will be presented and discussed but always from the lens of a developer. The developers interviewed are all in the United States and self-identify as socially-oriented or social-impact developers. Thus, this thesis will focus on development in the United States, particularly regarding policies and financial institutions. The adaptation of an existing social impact framework is used throughout all interviews for continuity and is based on the UK GBC framework discussed in Chapter Three.

Chapter One and Two provide a foundational literature review that set the stage for where the industry stands today. The function of the literature is to understand what academic and industry information currently exists on the subject of social impact and whether these writings further or detract from real estate becoming a tool for the creation of social value. Throughout my time at MIT, I have gathered resources that relate to the subject of social impact in the real estate sector. Even so, I found a few thoughtful resources explicitly focused on the United States. Therefore, the literature covers a global perspective and often refers to the sector in its entirety and not just the United States real estate sector. Most of the literature is written by organizations based in Europe, which is far ahead of the United States in setting standards for social impact in business practice. Each piece of literature builds on the previous and sets the framework for the interviews in Chapter Three. The literature and interviews then provide the base for analysis and conclusion on how real estate developers define and implement their social impact goals through the real estate development process.

The Impacts of Real Estate

The real estate industry is one of the largest sectors in terms of financial value in the global economy. It is estimated that 50 to 70% of global wealth is from land and real estate assets. (Razzaz, et al., p. 3) With such significant financial value associated with a singular sector, the real estate industry, in particular, has a critical role in creating positive social outcomes for society. Many of the functions that support human well-being are housed within real estate development projects: housing, schools, hospitals, community center, office spaces, grocery stores, religious centers; the list continues. Housing and schools are particularly important categories and, in many countries, a fundamental human right. The office of the United Nations High Commissioner for Human Rights ratified the United Nations Human Rights to include the right to adequate housing. (The Right to Adequate Housing.) It is well known that having secure, stable, and healthy housing is a strong indicator of overall well-being for an individual.

Land is a particularly sensitive aspect of the real estate industry, as careless and forced displacement of disfranchised communities has plagued the sector for centuries. A study by Transparency International found that "*in the last decade, as much as 227 million hectares of land – the size of Western Europe – mostly in developing countries, has been sold or leased, mainly to international investors*." (Harden and Heinrich, p.12) Foreign investors buying up land is a dangerous practice, as typically, they have less knowledge and care for disrupting existing communities. Also, allowing foreign investors to buy land can extract financial value from the community; rather than reinvesting it into the community as a local developer or landowner would. Land has a strong tie to identity and history. In the 2009 Food and Agriculture Organization (FAO) report Towards Improved Land Governance, noted the link between issues such a climate change, gender inequality, community identity, increased demand for natural resources, food, water, and energy insecurity, and violent conflict were proved to be inseparably linked to land. (Palmer, David, et al.)

In addition, real estate is a significant generator of employment in both the construction sector and property management sector. There are an estimated 110 million formal construction workers globally, and an equivalent amount informally working in construction. (Comaru and Werna. p. 4) Protecting the safety and rights of construction workers is essential. The allocation of construction jobs to local workers can provide economic opportunity for those from within a community, deepening the localized impact of a development project.

At the human level, many health impacts are based on the air quality of the buildings we spend the majority of our time in. An Organization for Economic Cooperation and Development (OECD) study found that people on average spend 90% of their time indoors. (OECD, p.1) This staggering statistic puts into context the importance of developing clean, safe, and healthy buildings. Not only are how we build affecting human health, but it is also affecting our environment's health. Roughly half of all non-renewable natural resources are used in "*land development and construction, either as manufactured materials, building components, equipment, etc. or in associated transportation*." (Royal Institution of Chartered Surveyors, p.102)

Lastly, thoughtful urban, architectural, and landscape design creates cultural value and a sense of place. Well-designed spaces have also been proven to increase people's happiness and concentration. Design can also be used to develop inclusivity and belonging. Also, the architectural design of buildings can create cultural value. The Royal Institution of Chartered Surveyors, Advancing Responsible Business in Land, Construction, and Real Estate Use and Investment Report created Figure 1, which illustrates how the real estate sector has a substantial impact at every phase of the development process.

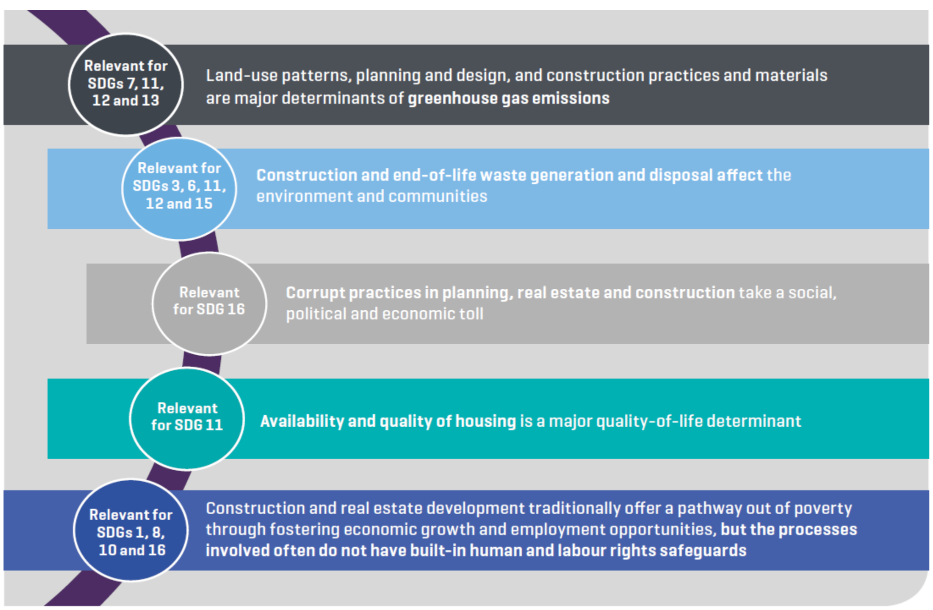

Figure 1: The sector's sustainability impacts and relevant UN sustainable development goals (SDGs) (Royal Institution of Chartered Surveyors, p.11)

Real Estate as a Commodity

In the 2011 Urban Land Institute article, Reinventing Real Estate, Jim Heid describes how real estate has become a commodity. The real estate industry has accepted *real estate* as the term for both what it does and what it creates. By definition, real estate is "all land and improvements that are immovable." (Heid) However, the increasing complexity of how the industry goes about its business and the positive impact it can have on the broader society defies the static nature of this one-dimensional definition.

Recently, industry leaders are shifting the discussion from the topic of real estate to the *built environment*. The latter term provides a more apt, multidimensional view of the industry's scope, encompassing "*the manmade surroundings that provide the setting for human activity*." (Heid)

After World War II, real estate development changed from being locally focused and completed by developers who were more closely associated with where they developed properties to a global nature where developers were not necessarily close with where they developed and who they developed for, therefore commoditizing real estate as a product. (Heid) As typical in the commoditization of the industry, the product became streamlined and consistent for efficiency and became a replicable formula. This was when cities and communities started to see the same corporate office parks, strip malls, and suburban communities replicated across the states and globally. In this process, developers began to see consistent financial returns, but diminishing social and environmental returns. Although the commoditization allows for the rapid production of the new building stock and efficiency, it also means there is less consideration of local context.

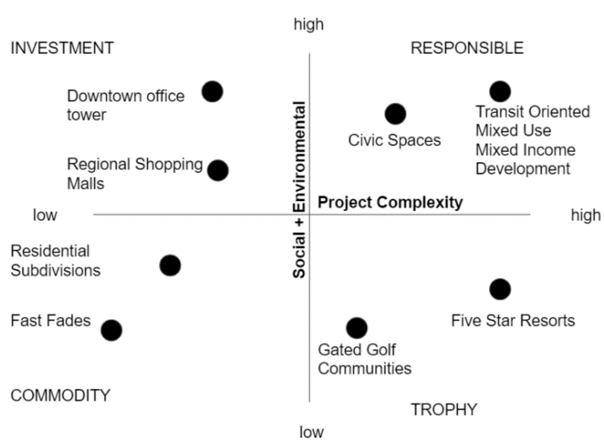

Figure 2: Real Estate to Built Environment - Four Directions for the Industry (Original: Heid, 2011, Recreated: Nicole Zaccack, 2019)

Heid's four categories on the graph define the four directions the industry as a whole has created. Each category represents different degrees of complexity, contribution to society, risk and reward, and their trade-offs.

Commodity real estate is based on maximizing efficiency by creating a formula to replicate real estate, or the "product" regardless of location and community culture. This type of development puts real estate in the position of a solid, modular product rather than the interdependent, customized system it is. This product often disregards environmental and social impacts. A majority of merchant builders and national developers fall into this quadrant.

Trophy real estate are the highly photographed and advertised projects. These projects are typically developed to eminent a brand and firm's "values." However, to be outwardly expressive, they dismiss the true social and environmental needs. As described by Heid, "*Due to its showmanship rather than substance, much of this class of real estate lies in distress, overleveraged and underwater, because it was built upon promotion and fleeting status in lieu of a deeper sense of purpose.*"

Investment real estate is the stable product class in which the sector is viewed as another investment vehicle amongst a portfolio of bonds and stock. Due to the underlying goal of reliable and consistent financial returns, these products are based on financial engineering, the efficiency of design, reliable delivery, and asset management, meaning societal impacts take a back seat. Although these developments provide social benefits such as tax dollars, job opportunities, and additional housing stock, they do not create monumental or systematic change or influence.

Responsible real estate builds from the other three quadrants but takes it to the next level by putting environmental and social returns at the same level of importance as financial returns. It provides the innovation and creativity of trophy real estate as well as the fiscal discipline and strong execution of investment real estate. The key to this quadrant is that the developer recognizes the product has a responsibility to create positive value in the built environment. Its purpose is to not only create long term financial value for its investors but long term social value for society.

The Growth of Socially Oriented Developers, An Illustrative Case Study: Shift Capital

Responsible real estate, as described by Heid, is slowly becoming more of the norm, with financial tools and capital stacks creatively being structured to encourage the pursuit of socially-oriented projects. The key to the development of responsible real estate is the growth of non-profits, developers, and financial agencies being formed with the sole purpose of understanding, implementing, advocating, and measuring the social use of real estate. These types of entities push developers in the other three quadrants towards the responsible real estate quadrant by demonstrating the feasibility of developing for social and financial returns. For example, Shift Capital, a certified B-Corporation, started in 2012, as a developer to create more "intentional, thoughtful, and impactful" real estate in under-invested urban communities based out of Philadelphia. (Impact) Shift Capital is an example of a firm working to develop responsible real estate in their local community of Philadelphia. Shift Capital, like many other socially oriented firms, have created their theory of change and process to produce their intended results.

I will use the Shift Capital model and outcomes as an illustrative case study of the types of firms that best exemplify responsible real estate. Shift Capital's approach to creating impact is through recognizing a problem of the industry - residents of under-developed neighborhoods are often systematically displaced as developers look for opportunistic development with little concern for protecting existing cultural, social, and economic fabrics. In their 2018 Report, Shift Capital defines their theory of change as, *"We look to increase the long-term self-sufficiency, safety, prosperity, and quality of life for residents in underserved urban areas through holistic, thoughtful real estate development and services, blended financing across the private, public and nonprofit sectors, and partnership and programming with city, community, and industry leaders."* (Shift Impact Report 2018, p.14)

To actualize their theory of change, Shift Capital has created a logic model that uses key inputs and outputs to shape and measure the effectiveness of their theory of change (Figure 3). A vital component of this successful process is the right inputs, which include "patient capital, skilled, mission-driven staff, and value-aligned partners." (Shift Impact Report 2018, p.15) Shift Capital recognizes that if the initial resources and partners are not fully aligned with their theory of change, despite all steps taken, the initial inputs will disrupt the path of success. For example, if the capital used for a Shift Capital project was through funds looking for fast, aggressive returns, despite all efforts by the mission-driven staff and community partners, the money would derail the outcomes.

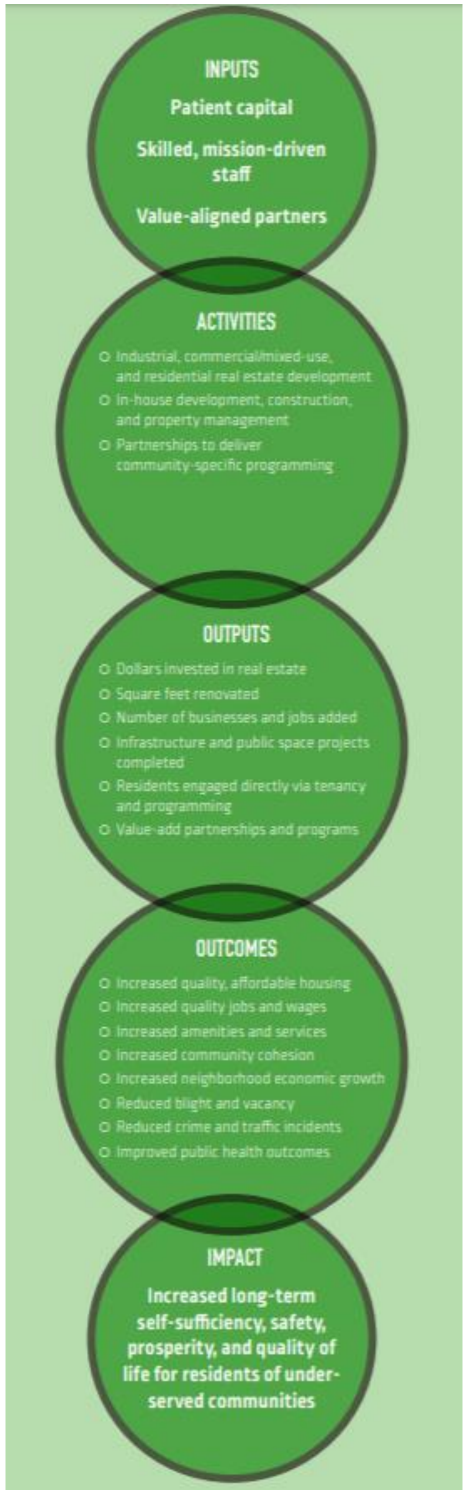

Figure 3: Shift Capital Logic Model (Shift Impact Report 2018, p.15)

Also, Shift Capital has established goals and created systems to monitor and track the effectiveness of their development goals. This effort to develop metrics can be seen in a similar light as industry-standard metrics to measure financial returns like Internal Rate of Return "IRR" or Weighted Average Cost of Capital "WACC." Through the creation of measurable social outcomes, projects can be compared for their "value" beyond just their financial returns. Listed below are Shift Capital's six goals or impact themes as well as the related United Nations Sustainable Development Goals they aim to support. For each of these impact themes, Shift Capital has created quantitative measures to show how they measure the effectiveness of each theme for each development project OR overall.

Housing: Number of units, Number of mixed-use buildings, number of units at 60% area median income for Philadelphia. UN Sustainable Development Goal - #11 Sustainable Cities and Communities

Economic Development: Number of temporary jobs, Number of permanent jobs, Number of new businesses occupying vacant spaces. UN Sustainable Development Goal - #1 No Poverty, #8 Decent Work and Economic Growth

Community: Percent of properties 0.5 miles from transportation, Number of projects that included public parks or facade work, Number of vacant lots purchased. UN Sustainable Development Goal - #11 Sustainable Cities and Communities, #17 Partnerships for the Goals

Health and Safety: Amount of dollars invested in fire safety systems, Number of respite beds for individuals suffering with homelessness or addiction, Dollar amount of grants received for transportation, and pedestrian safety. UN Sustainable Development Goal - #3 Good Health and Well-Being

Art and Culture: Number of public murals, Number of creative economy tenants. UN Sustainable Development Goal - #9 Industries, Innovation, and Infrastructure, #11 Sustainable Cities and Communities

Inclusion and Diversity: Percent of the team from under-represented groups, Percent of the advisory board from under-represented groups, percent of dollars spent with Philadelphia-based organizations. UN Sustainable Development Goal - #10 Reduced Inequalities

The UN Sustainable Development Goals and Real Estate

Shift Capital's six impact goals fit into a global initiative set by the United Nations (UN) for all future development to be sustainable. As a part of the 2030 agenda for sustainable development, 17 Sustainable Development Goals (SDGs) were formed. These 17 SDG goals were approved by all UN member states. They were created to "*recognize that ending poverty and other deprivations must go hand-in-hand with strategies that improve health and education, reduce inequality, and spur economic growth – all while tackling climate change and working to preserve our oceans and forests*." (UN, Sustainable Development Goals)

These goals have become the standard for sustainable business development. They are often recognized by environmental, social governance (ESG) rating agencies as the universally accepted goals for the creation of value. Although defining social value and creation is particularly tricky due to its subjective nature, SDGs are the most widely accepted guidelines. As evident by Shift Capital's six impact goals, many socially-oriented firms are aligning their values to SDGs to illustrate how their work fits into a global effort to create social equity. It also gives Shift Capital's goals, credibility as important causes aligned with globally recognized goals. Throughout this thesis, the SDGs will be referenced and used as a means to thematically sort impact goals. Although all 17 goals tangentially relate to the real estate industry, the eight listed below are intrinsically linked.

Goal 3: Good Health and Wellbeing
Goal 7: Affordable and Clean Energy
Goal 8: Decent Work and Economic Growth
Goal 9: Industry, Innovation, and Infrastructure
Goal 11: Sustainable Cities and Communities
Goal 12: Responsible Consumption and Production
Goal 13: Climate Action
Goal 15: Life On Land

Despite these SDGs being considered the standard on sustainable development and very relevant to the real estate sector, they are rarely mentioned by real estate development firms. To more evidently connect the SDGs to the real estate, the UN, RICS published a document in 2018 titled '*Advancing Responsible Business in Land, Construction, Real Estate Use, and Investment – Making the Sustainable*

Development Goals a Reality' which highlights the SDG goals that are most aligned with the different phases of the development process. RICS separates the development of buildings into three phases of the real estate "life cycle." These three phases are the development phase, real estate use phase, and the recovery phase. As seen in Figures 7, 8, and 9 below, RICS had identified five key issues that are present in each of these three phases.

Figure 7: Development Phase Issues (Royal Institution of Chartered Surveyors, p.16)

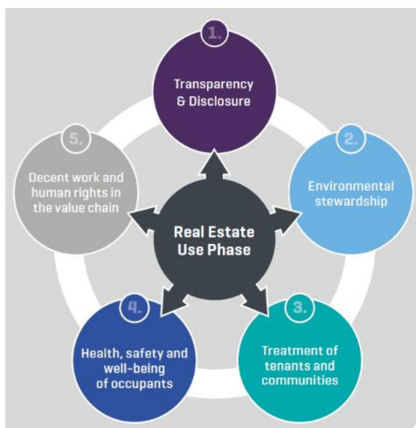

Figure 8: Real Estate Use Phase Issues (Royal Institution of Chartered Surveyors, p.19)

Figure 9: Recovery Phase Issues (Royal Institution of Chartered Surveyors, p.22)

The 15 issues (5 issues in 3 phases) are all critical, and each aligns with many of the SDGs. Where RICS pulls in significant environmental, governance, and social impacts, this thesis will focus on the 5 "social" issues, rather than environmental or governance issues. RICS describes each dimension, the related SDGs, and the key consideration for each issue.

<u>In the Development Phase:</u>

1) Land Governance

Related SDG’s to Land Governance

(Royal Institution of Chartered Surveyors, p.17)

Some of the key considerations for land governance include land acquisition as it determines land ownership and tenure; land value which dictates development decisions like affordability; and adequately managed land use for community needs. Land governance particularly affects Indigenous Peoples as it often results in forced displacement and relocation from traditional historic sites, a lack of representation and engagement, and negative economic, social, and environmental impacts. Another key consideration is the fundamental right to housing and adequate living conditions. Developers should be conscious when handling land governance and its relationship to adequate housing by assessing potential impacts on existing residents, protecting human rights, and creating fair land agreements. (Royal Institution of Chartered Surveyors, p.17)

3) Respecting Workers’ Rights

Related SDG’s to Respecting Workers’ Rights

(Royal Institution of Chartered Surveyors, p.17)

Some of the key considerations for respecting workers’ rights include freedom of collective bargaining and associations by fair treatment of union workers. Non–discrimination of workers helps to mitigate gender inequality and prevent disadvantages in the workplace. Protecting worker health and safety is especially important in the construction sector, as it can prevent potential short and long-term fatal work-related injuries. Lastly, protection of workers' rights, mainly migrant workers, through policies against the use of child labor and forced labor, are critical. Although these issues may not seem as applicable in developed countries, they do relate as there are many informal workers in the construction sector as well as migrant workers working in the supply chain domestically and internationally. (Royal Institution of Chartered Surveyors, p.17)

<u>In the Real Estate Use Phase:</u>

3) Treatment of Tenants and Communities

Related SDG's to Treatment of Tenants and Communities

(Royal Institution of Chartered Surveyors, p. 20)

One of the key considerations for the treatment of tenants and communities is gentrification, which causes the displacement of existing residents due to the lack of affordable housing and community space for existing residents. Another key consideration at the human scale is the feeling of isolation and exclusion caused by the lack of involvement and adequate representation of traditionally marginalized individuals. Visible and invisible discrimination of access to buildings is another issue, typically caused by not providing an opportunity for individual members of society to engage in a space. Lastly, security issues are often a consequence due to a lacking sense of community. (Royal Institution of Chartered Surveyors, p.20)

4) Healthy, Safety and Well-Being of Building Occupants

Related SDG's to Healthy, Safety, and Well-Being of Building Occupants

(Royal Institution of Chartered Surveyors, p. 20)

Some of the key considerations for the health, safety, and well-being of building occupants include offering access to individuals with disabilities and dismantling barriers of entry for all. Essential to the health and safety of building occupants is access to water, sanitation, and hygiene; providing these basic needs for every occupant should be obligatory. Lastly, all real estate development has critical implications on indoor air quality, which can affect an occupant's health. Although balancing indoor air quality with energy conservation measures can be challenging, the quality of air and proper ventilation directly relates to proven health outcomes. (Royal Institution of Chartered Surveyors, p.20)

In the Recovery Phase:

1) Strategic Site- Use Reevaluation

Related SDG's to Strategic Site- Use Reevaluation

(Royal Institution of Chartered Surveyors, p. 23)

One of the key considerations for strategic site-use reevaluation is the potential displacement of residents and communities, which typically occurs when there is a change of use resulting in gentrification and unaffordability. Many of the key considerations mentioned in the land governance issue relate again during the recovery phase of real estate when strategic site-use reevaluation is occurring. Lack of transparency during land-use decision-making and poor land-use planning creates many of the social issues. Also, the consideration of historical and heritage sites is critical, particularly if they are being considered for a new function, adaptive reuse, or to be torn down. (Royal Institution of Chartered Surveyors, p.23)

The UN SDGs and RICS key development issues will be referred to throughout this thesis as a means to find alignment between the goals set an individual development project scale, to the global or institutional scale established by the UN and RICS. The alignment of these goals illustrates the most relevant issues to the real estate industry, as well as issues that may be overlooked are.

Real Estate Development Process

RICS divided the real estate lifecycle into three phases and highlighted which issues were most critical in each phase. This illustrates that each phase of the real estate lifecycle plays a crucial role in creating specific social impacts. To realize the SDGs through real estate, developers need to strategically use the development process to implement their goals at the proper phase that will optimize impact. Understanding the development process and each phase is essential in answering the central question of this thesis: how do developers define and implement their social impact goals through the real estate development process. While the development process differs depending on each organization, for the sake of this thesis, the standard six steps of the development process will be defined as:

1) Idea Inception
2) Feasibility
3) Pre-construction
4) Construction
5) Operation
6) Measure

I received input from my interviewees on these steps and their order. I also referenced the 2009, Center for Real Estate thesis "*Application of the Design Structure Matrix (DSM) to the Real Estate Development Process*" by Benjamin Bulloch and John Sullivan to determine the steps. Bulloch and Sullivan conducted interviews with five real estate executives to get a consensus on the real estate development process. While their six steps vary slightly from those listed above, it is helpful to note that they found that most projects do not make it through every stage, and after each stage, there is a "*Decision Gate*" in which the developer needs to determine if they should move forward, stop or go back. This process is iterative and requires a continuous feedback loop. Also, the urgency of realizing the idea due to things like the competition of site acquisition or pressing social issues that need to be addressed, will expedite the process and cause phases to blend. The six steps of the real estate development process are briefly described below:

Idea Inception:

Every project starts with an idea, but the avenue which leads to the idea can vary dramatically. Ideas for a project could either be "*a site looking for a use or* a *use looking for a site"* (Jarchow). The idea could also be generated from many different organizations and not necessarily solely the developer. A state, city, or neighborhood could publish a Request for Proposal or "RFP" with the idea and or site already determined. In addition, a non-profit organization with an idea could reach out to developers to help realize said idea. Traditionally if a site is identified, developers attempt to maximum value using the principle of highest and best use. MIT Center for Real Estate Professor David Geltner defines highest and best as, *"each site being used in the way that is most productive for that location. Note that productivity in this sense is represented by the net difference between the value of what is produced on the site and the costs of the mobile factors of production, that is, the land residual as we have defined it.*" (Geltner, Miller, Clayton, and Eichholtz, p.63) This definition describes highest and best use in terms of residual financial value. However, it does not incorporate social or environmental values. If a developer has an idea in mind, they will begin to look for a parcel that satisfies the requirements to realize their idea.

During this stage, the developer is doing initial studies of the market, design, zoning, and financing through an iterative project to understand the possibilities available. This stage is typically kept internal, rarely incorporating outside consultants. However, at this phase, a developer may begin to consider a joint venture and start putting out feelers towards partners.

Feasibility:

At this stage, the developer hires external consultants to develop a feasibility study through conceptual designs, market studies, and the permitting documents. Also, the developer has advanced their back of the envelope financial model to an extensive Pro-forma. In the case of an RFP, the developer has decided to engage in the process after and submitted a proposal to the appropriate agency. For affordable housing projects, the developer has begun to investigate and apply for potential subsidy programs as well as Low Income Tax Credit (LIHTC) applications. This phase is when the developer gathers as much information as necessary to decide whether or not to pursue the opportunity. The developer also needs to determine if they have the human and financial capital to implement the project.

Pre – Construction:

In the preconstruction phase, the developer has fully engaged the development team to get the project ready for construction. This phase often aligns with the architect's design phases: schematic design, design development, 50%, and 100% construction documents. In addition to the architect, the developer has hired other consultants such as sustainability, landscape, geotechnical, engineer, legal, general contractor, interior designer, expeditor, and so on. The developer coordinates full team meetings to move the project towards construction. Throughout the design process, the team is value engineering and redesigning to ensure the project is within budget. A gate to this phase for developers applying through an RFP or Low Income Tax Credits is that the developer must have "won" or received an allocation of funding before engaging in this phase. For a traditional project, the developer is now looking for equity and debt financing to complete the capital stack as well as a construction loan to begin the construction process.

A major part of this phase is the public approvals process. The length of this process highly depends on the complexity of the project. The developer is meeting with governing agencies and departments to ensure all necessary approvals are received. In many cases, the developer will also be negotiating a public benefits package with the governing agencies if density bonuses or variances are given. The developer also participates in public presentations with the community to receive feedback on the design and program. Ideally, developers are collaborating with the community through design workshops and planning meetings to ensure as many local stakeholders' voices are incorporated.

Developers will also attempt to get lease commitments from tenants of significant portions of the project. Also, the developer will formalize any partnerships with community groups or non-profits who be a part of the project. All of the aspects of this phase are happening concurrently and often require adjustments.

Construction:

At this phase, the design team has taken the project to 100% CD's, and the contractor can begin construction. The developer has secured a construction loan and acquired the title of the land. The contractor then hires the necessary subcontractors and builds the project based on the construction drawings and specifications. During this phase, the developer and design team are participating in quality assurance and quality check (QAQC) meetings as well as responding to any submittals or requests for information needed by the contractor. The length of this phase once again depends on the scale and complexity of the building. While construction is taking place, the developer is also checking their financial assumptions and defining their marketing strategy. Typically, the developer is also trying to pre-lease as much of the space as possible.

Operation:

Once a certificate of occupancy or "CO" is granted, and construction is at substantial completion, the tenants begin to occupy the property. The developer engages with an external or internal property manager to operate and manage the property. The management team ensures the property is appropriately utilized and program events to engage with the community and tenants. Ideally, the team fully leases up the property, and the property becomes financially stabilized. At this point, the developer will replace or convert the construction loan to a permanent loan. Throughout the operation, the developer maintains the property and taps into reserves when needed to replace equipment that is broken. In many cases, developers will exit and sell the asset once stabilization occurs, however typically, social-oriented firms, especially affordable housing developers who have covenants on their properties, hold the asset to ensure the purpose of the development continues.

Measure:

Measuring the outcome of a development project is a crucial aspect of the development process. Measuring outcomes is best done at each step of the development process for optimal results. Although typically, this is done for financial outcomes, with regular reporting to investors, debt providers, and partners, the social outcomes are not. This phase is critical to this thesis, as it allows us to quantify social outcomes. There are a limited number of consultants that measure social outcomes in the feasibility phase or post-operation of a project, while even fewer development firms do so internally.

Chapter Two: Measuring Social Impact

Social impact metrics and the measurement of these metrics are an essential development that will allow all stakeholders in the development process to quantify the non-financial outcomes of real estate. The importance of social metrics within the real estate industry also correlates with the rise of environmental, social, and governance (ESG) funds. As ESG funds base their investment decisions on both financial and environmental, social, and governance indicators, data that proves social returns are becoming more valuable. There is no universal agency or system to rate social impact in real estate; however, the current leading industry report is done by GRESB. GRESB was formed in 2009 to assess and benchmark the environmental, social, and governance performance of real assets. GRESB produces an annual sector-wide assessment and provides each entity its own rating as well as a peer group comparison for entities in the same country, region, sector, and investment type. In 2019 over 1,005 entities in 64 countries with over $4.1 trillion worth of assets were rated in this year's assessment. (GRESB) GRESB first started in 2009 with the Real Estate Assessment and Real Estate Development Assessment. In 2016 GRESB added the Infrastructure Assessment and created the first module, Health, and Well-Being. In 2018 they created the GRESB Resilience module. GRESB partners with top real estate asset associations to ensure their standards reflect industry best practices globally.

As the leading annual ESG report, this chapter will discuss the methodology that GRESB uses to assess real estate developers, a highlight of the questions in the scorecard that are relevant to social impact, and the 2019 industry results. After reviewing GRESB and this year's results, we will discuss the issues in which traditional ESG is rated and what specificities are needed to measure real assets. Lastly, new approaches to measure social impact and research centers focusing on this work will be described.

Understanding the tools that exist to measure real estate is important as these tools will then begin to influence how developers do their work. Measuring of social impact is incredibly complex, as it heavily depends on the project context, asset type, local stakeholders, and dimension of time. Also, the measurement of impact also depends on who is defining what to measure and what the value of the measure is. Whoever becomes the leading agency, will likely define what 'positive' social impact is, and set the parameters as to how to measure it. This is why it is critical to critique the existing tools, especially the leading tool GRESB, to highlight the strengths and shortcomings of the current tools.

Because of GRESB's position, their methodology and reporting is the best reference for criticism of ESG rating and a launching point to discuss areas of improvement. Despite criticism, GRESB should be recognized as taking the lead in this arena and pushing forward new techniques to measure non-financial impacts.

The Influence of ESG Investing

ESG or environmental, social, and governance are three core themes for measuring a company or business beyond its finances. The United Nations Led Initiative created these metrics, Principle for Responsible Investment (PRI), see Figure 4. Each of these categories is very broad in theme, and not every factor will play a material role in each company; therefore, the weight of importance of the E, S, or G category will vary. These standardized ESG factors have led to an upswell of impact investment funds. The 2019 GIN Annual Impact Investor Survey, reports a total of $502 billion dollars worth of impact funds. (GIN)

Figure 4: ESG factors as outlined by the UN PRI. (CodeGreen Solutions, GRESB)

This growth of ESG funds is, in part, due to the ability for investors to now standardize the way they measure social, environmental, and governance factors. These ESG factors are measured by industry rating agencies such as MSCI and Sustainalytics, as well as traditional financial rating groups such as Bloomberg and Moody's.

The Sustainability Accounting Standards Board (SASB) categorized real estate as infrastructure and determined which ESG factors are highly correlated to financial returns. As seen in Figure 5, a majority of these factors are material environmental issues. This apparent relationship between environmental issues and real estate is due to the fact that "*In the United States, commercial and residential buildings account for approximately 40% of total energy consumption.*" (Independent Statistics and Analytics)

Industry Level Map

☐ **Not likely a material issue for companies in the industry**

■ **Likely a material issue for companies in the industry**

Dimension	Issue Category	Infrastructure
Environment	GHG Emissions	
	Air Quality	
	Energy Management	
	Waste & Wastewater Management	
	Waste & Hazardous Materials Management	
	Ecological Impacts	
Social Capital	Human Rights & Community Relations	
	Customer Privacy	
	Data Security	
	Access & Affordability	
	Product Quality & Safety	
	Customer Welfare	
	Selling Practices & Product Labeling	
Human Capital	Labor Practices	
	Employee Health & Safety	
	Employee Engagement, Diversity & Inclusion	
Business Model & Innovation	Product Design & Lifecycle Management	
	Business Model Resilience	
	Supply Chain Management	
	Materials Sourcing & Efficiency	
	Physical Impacts of Climate Change	
Leadership & Governance	Business Ethics	
	Competitive Behavior	
	Management of Legal & Regulatory Environment	
	Critical Incident Risk Management	
	Systemic Risk Management	

Figure 5: Material issues for companies in the infrastructure sector according to SASB (CodeGreen Solutions, GRESB)

For this reason, many ESG investors will invest in real estate firms with high "E" ratings. In response, developers are actively pursuing ways to be more energy-efficient. Energy-efficient builds also decrease operating expenses and attract tenants who require specific features. Also, states are becoming even more stringent on energy requirements. For example, California has passed legislation to be zero carbon by 2045. (Krieger) Environmental factors are highly crucial for the industry to attempt to better the climatic issues our world is facing. There is still a lot of work to be done on measuring environmental factors, and a lot more funding needs to go into developing environmentally friendly buildings. However, this thesis will specifically focus on the social impacts of real estate, as it is still in its inception. This is in part due to the lack of sophistication and refinement in measuring social impacts of real estate as compared to the efforts done for environmental impacts through LEED, Living Building Challenge, and MEP software. Due to this lack of data, it is more challenging to make the argument of the long-lasting effects real estate has on human well-being. Therefore, developers looking for impact funding are likely to find more success in developing environmentally driven projects, as these projects are more rewarded than socially driven ones.

Positive ESG ratings also provide risk management for investors the CFA institute reported: "*65% of investors said that their motive for taking ESG issues into consideration was to help manage investment risks*." (Environmental, Social, and Governance (ESG) Survey) Also, there is a proven relationship between financial success and strong ESG rating for companies, see Figure 6. There are many theories behind this relationship, but the most universally accepted one is that companies that are concerned with issues of environment, social, and governance are proactively concerned with the long term health of their entity, which in turn leads to stronger financial performance.

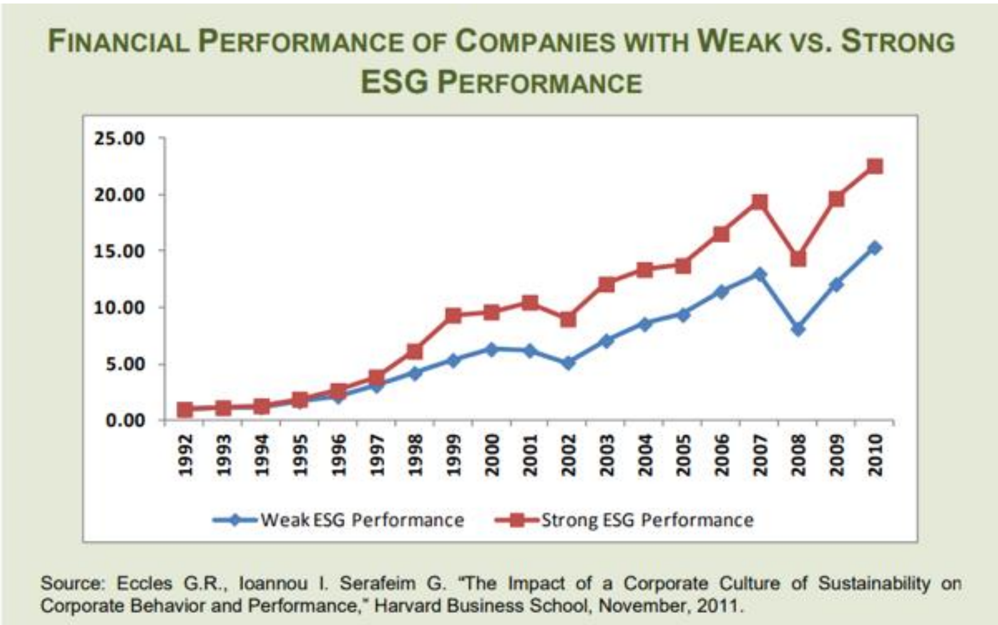

Figure 6: Financial Performance of Companies Based on ESG Performance (CodeGreen Solutions, GRESB)

GRESB: Methodology

Due to the increase in ESG funds, the real estate sector needed a way to benchmark their ESG scores. GRESB has become the most widely used agency that does this rating. This thesis will focus on the GRESB real estate developer assessment, rather than the GRESB real estate assessment. The real estate developer assessment is targeted towards companies and funds that focus on the development of new construction or major renovations rather than the management of existing assets.

The methodology behind the GRESB development assessment is described in their developer assessment reference guide. GRESB focuses its assessment on an entire development company and its portfolio, rather than one specific project. Developers opt into an assessment by submitting data to the GRESB portal by the annual July 1st deadline, GRESB then goes through the process of validating, scoring, and benchmarking the provided data.
The annual assessment is published each year in September, and each entry is given an overall score between 1-star to 5-star as well as a score for each specific category. The maximum number of points an organization can receive is 79 points, which is expressed as a percent from 0 to 100%. There are two categories to the score: Management and Policy (MP) and Implementation and Measurement (IM).

Management and Policy is defined as *"the means by which a company or fund deals with or controls its portfolio and its stakeholders and/or a course or principle of action adopted by the company or fund."* (GRESB, Developer Reference Guide) Management and Policy comprise 63.3% percent of the overall score and is equal to 50 points.

Implementation and Measurement is defined as *"the process of executing a decision or plan or of putting a decision or plan into effect and/or the action of measuring something related to the portfolio."* (GRESB, Developer Reference Guide) Implementation and Measurement comprise 36.7% percent of the overall score and is equal to 29 points.

There are five aspects of the total score, listed with their percent weight of overall score: Management, 13.9%, Policy and Disclosure, 16.5%, Risk and EMS, 10.1%, Stakeholder Engagement, 12.7%, and New Construction and Major Renovations, 46.8%. Each of these five aspects has indicators represented by a question. Each question describes the intent of indicator, whether it relates to Management and Policy (MP) or Implementation and Measurement (IM), number of points, and whether it is an E, S, or G category. The five aspects, as described by the developer reference guide, are listed below:

Management - The intent of this aspect is for participants to explain how they incorporate ESG into their business model, who is in charge of managing ESG issues, and how ESG relates to investor relations.

Policy and Disclosure - This aspect intends to understand the participants' specific ESG policies, and how ESG issues are communicated to others, specifically investors.

Risk and EMS (Environmental Management System)- This aspect focuses on risk mitigation relating to climate change, corruption, market risks, and environmental legislation. Also, this aspect asks participants how they mitigate ESG risk through the use of an EMS (Environmental Management System).

Stakeholder Engagement - This aspect is about the participant's engagement with employees, tenants, local community, and direct third-party suppliers.

New Construction and Major Renovations- This aspect focuses on how participants tackle ESG-issues during the design, construction, and renovation of buildings. This category represents 46.8% of the total score as the design/construction phases of development constitutes a significant amount of environmental, health, and social outcomes.

GRESB: The Score Card

In this section, we will review the specific indicator questions that relate to "S" or social factors in each of the five aspects as determined in the developer assessment. In total there are 44 questions in the entire assessment, broken out into 5 Management questions, 9 Policy and Disclosure questions, 4 Risk and EMS question, 8 Stakeholder Engagement questions, 18 New Construction and Major Renovations questions. (GRESB, Developer Reference Guide)

In total, only 5 out of the 44 assessment indicators in the developer assessment genuinely relate to the social implications of the real estate sector on the local community, stakeholders, and occupants. In total, the number of points allocated towards the "social" impact is 9 out of 79 or 11% of the total score. Based on how GRESB marks their indicators into E, S, G categories, environmental "E" indicators make up 22.5 points out of 79 or 28.4% of total score, social "S" indicators make up 18 points out of 79 or 22.7% of total score, and governance "G" makes up 38.5 points out of 79 or 48.7% of total score. In the stakeholder engagement aspect, 12 of the total 18 “S” points relate to employee wellbeing rather than occupant or community wellbeing. Below is a summary of the relevant “S” indicators in the 5 aspects.

Management:

None of the 5 questions specifically ask about what the organization’s “S” objectives are and who manages them. Rather the questions lump ESG all into one category, likely because it is understood that one committee or individual is responsible for the entire ESG strategy and implementation despite environmental, social, and governance issues all being substantial and different issues.

Policy and Disclosure:

One of the relevant "S" indicators asked about the policy/policies in place to address social issues. The response options vary from child labor to tenant/customer health and well-being to stakeholder engagement. (GRESB, Developer Reference Guide) It's important to note that this question is only 2 points, while the equivalent question relating to environmental issues is worth 3 points. The categories of social issues listed as response options highlight the issues that GRESB believes to be the most relevant. Also, some of the response options distinguish tenant v. employee social issues. Only three response options relate to the impact on tenant and/or community social issues.

Risks and EMS:

One of the relevant “S” indicators asked about the performance of asset-level environmental and/or social risk assessments as a standard during the due diligence process for new acquisitions. The response options that relate to social risk are health and well-being**,** indoor environmental quality**,** socio-economic, and transportation. (GRESB, Developer Reference Guide) This question is worth 2 points. Although the question refers to environmental and social risks, only four of the seventeen response options relate to social issues. Some key social issues not accounted for are displacement of existing residents, lack of diversity, and disruption of culture and art.

Stakeholder Engagement:

Despite GRESB describing this aspect as focusing on tenants and the local community, as well as employees and suppliers, none of the questions in this aspect are about tenants or the local community. Oddly, six of the eight questions related to employee satisfaction, training, and health and well-being, and two of the eight questions relate to ESG requirements of third-party suppliers. All six of the employee questions are considered "S" social issues. Employee and organization social issues are incredibly important and necessary to monitor. However, to have a stakeholder engagement category for a real estate developer assessment and not have a single question that relates to tenants and local community is a misrepresentation of stakeholder engagement. Also, there are very few "S" indicator questions, and none of them to relate to tenant issues is very concerning.

New Construction and Major Renovations:

Within the health, safety, and well-being subsection, a relevant "S" indicator askes how the entity promotes occupant health and well-being in its new construction and major renovation projects. (GRESB, Developer Reference Guide) Response options range from planning and design requirements to common occupant health and well-being measures to provisions that verify health and well-being performance include. (GRESB, Developer Reference Guide) This question is worth 2 points, and is loaded with information on occupant's health and well-being and speaks to the different ways developers can design spaces to encourage positive impacts.

Community Impact and Engagement:

The last two relevant "S" indicator questions are in this aspect. The first question asks how the entity asses potential socio-economic impact on the community as part of planning and pre-construction. The response options include assessment of housing affordability, crime levels, livability score, local income generation, residents' well-being, and walkability score. (GRESB, Developer Reference Guide) This question is worth 1.5 points and addresses the implications of development on occupants as well as the larger community. Additional response options are missing, such as the amount of displacement and marginalization created. Another significant issue is the question only asks if these impacts are assed in the planning and pre-construction phase. The question does not ask for realized impacts, which is where the importance of impact lies.

The last "S" indicator is about systematic processes to monitor the impact on the local community during different stages of the project. A few examples of response options are development and implementation of a communication plan and identification of stakeholders and impacted groups. (GRESB, Developer Reference Guide) This question is worth 1.5 points and offers some accountability for developers actually to monitor their impacts, however, it does not score the realized impacts or mitigation of said impacts.

GRESB: 2019 Report and Industry Spread

The 2019 real estate results include 1,005 participating entities, over 100,000 assets in 64 countries, with 38,274 of those assets in the Americas, Figure 10. Also, the average overall GRESB score in 2019 is 72, a 4-point increase from 2018, Figure 11. On average public entities score 1 point higher than their private counterparts.

Figure 10: Benchmark Size and Asset Locations (GRESB, 2019 GRESB Real Estate Results)

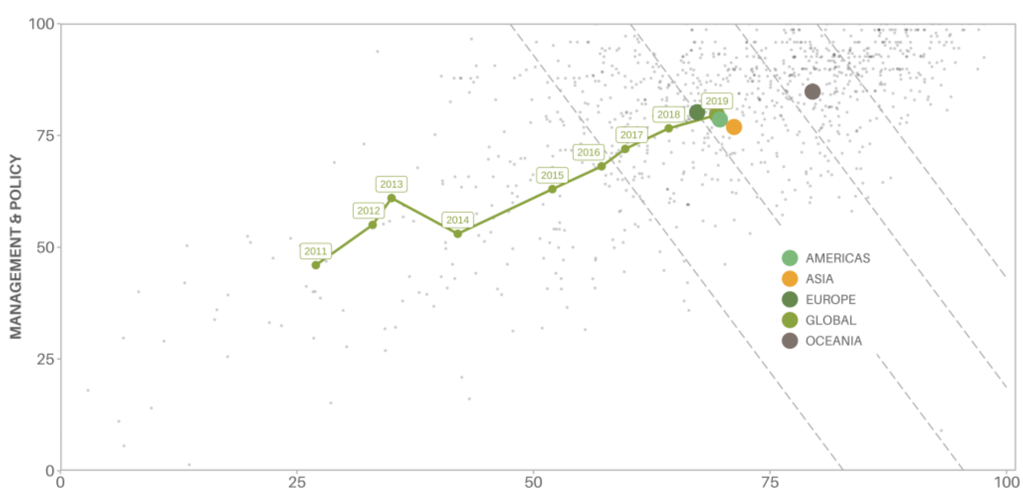

Figure 11: Overall GRESB Scores (GRESB, 2019 GRESB Real Estate Results)

Key findings in relation to social "S" objectives include increased community engagement and impact monitoring. In 2019, 81% of participants assessed the socio-economic impact of their development activities. Of that, 61% of participants globally track residents' well-being. As seen in Figure 12, socio-economic impacts are more actively assessed in new redevelopment projects over existing assets. The results represented in Figure 12, illustrate the responses to question 13 in the New Construction and Major Renovations aspect. As noted, this question solely asks about the pre-development assessment of socio-economic implications rather than the realize implications. Therefore, it is concerning that less than 50% of participants assess the potential impacts of their development on affordable housing and local income generation.

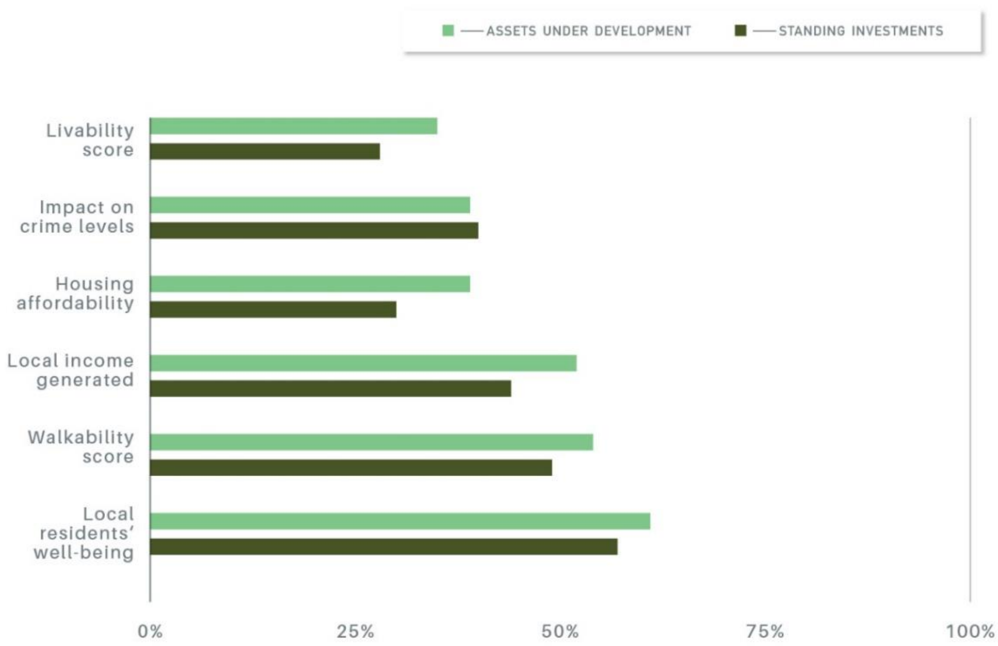

Figure 12: Socio-Economic Impact (GRESB, 2019 GRESB Real Estate Results)

GRESB reports that, in general, the sector has recognized and invested in the health and well-being of its occupants. The social determinants of health should be addressed in the real estate development process; in fact, GRESB has created a module specifically on this topic. They have also released a report and partnered with health industry groups, Center for Active Design, and International WELL building institute. This issue relates to the UN Sustainable Development Goal # 3 – Good Health and Well Being. Many of the indicator questions about health and well-being are asked from the lens of the tenant/customer and employee. Overall in all four categories of health and wellbeing, participants had 11% more programs in place for their employees over those available for their tenants/customers (Figure 13).

Figure 13: Health + Well Being (GRESB, 2019 GRESB Real Estate Results)

Figure 14 shows the different property types (healthcare, residential, office, industrial, and retail) and specific strategies developers use to ensure the health and well-being of their tenants. The universally most used strategies that 50% or more of all property employ are indoor air quality, thermal comfort, lighting controls and/or daylight and social interaction and connection. Interestingly, residential property types, as a whole, performs the worst comparatively in healthy eating, and physical and/or mental healthcare access. However, in terms of inclusive design and social interaction and connection, residential properties overall perform better than other asset classes.

Figure 14: Variety of Actions to Promote Well Being in Tenants
(GRESB, 2019 GRESB Real Estate Results)

At the larger community level, universally, 71% of participants included community well-being and health in their community engagement report. Developers realize this impact through employment creation in local communities (65%) and enhancement programs for public spaces (71%). 78% of participant's report monitoring the impact on local communities, while only 56% specifically report health and well-being. The largest area participants report in is supporting charities and community groups, see Figure 15.

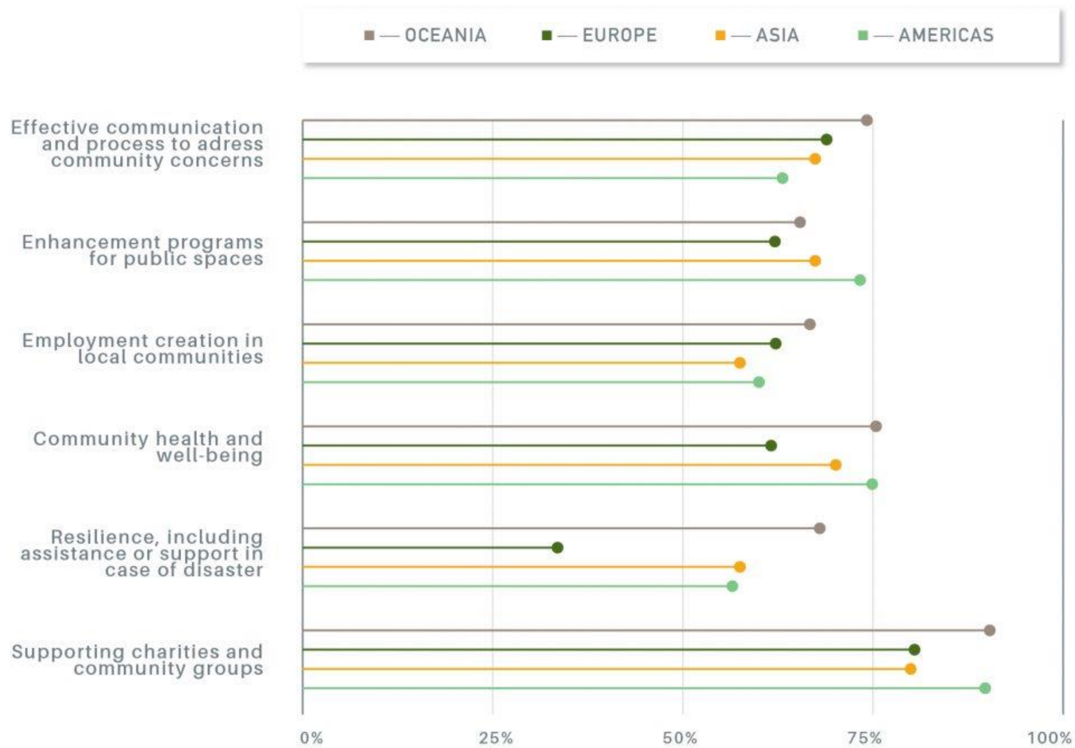

Figure 15: Variety of Actions to Promote Well Being in Tenants
(GRESB, 2019 GRESB Real Estate Results)

The annual report also ranks the top private and public (listed) participant's in each sector. This year's top residential (public) developer is AvalonBay Communities, and residential (private) developer is Greystar Real Estate Partners. The top office (public) developer is Kilroy Realty, and office (private) developer is CommonWealth Partners. The top retail (private) developer is Ivanhoe Cambridge, and retail (public) developer is The Macerich Company. The top industrial developer is BentallGreenOak, and industrial (public) developer is Prologis. The top two diversified developers are Oxford Properties Group and J.P. Morgan. (GRESB, 2019 GRESB Real Estate Results).

Limitations of Social Impact Ratings

Although GRESB does give us the best understanding as to where the industry currently stands on "social" impacts and creates a streamlined methodology of doing, so there are areas of further development needed. GRESB does facilitate improved performance of ESG factors by illustrating to the sector high scoring industry leaders who push the majority of developers to perform better. However, GRESB's assessment has issues that may be inaccurately portraying ESG scores and highlighting the industry leaders who are not necessarily the leading social impact developers. These issues are described below.

Entity v. Product: As illustrated in the GRESB scorecard, a majority of the indicators in the assessment are about ESG at an organizational level, e.g., board governance, company policy, employee happiness, and reporting. Few indicators ask about the products created by these organizations. Since the real estate sector is primarily based on physically developing products that humans interact with, the impacts created by the sector should be measured at the product level. The industry needs to understand how each decision in the built space is impacting environmental, social, and governance issues. Although this level of measurement is much more granular and requires further sophistication, this is where we will discover the results real estate has at the human scale.

Reported v. Realized: The GRESB assessment is done by self-reporting, and a majority of the social indicators ask about evaluations and monitoring of impacts. However, none of the indicators ask for the participants to report the results of their decisions, which is the real measure that needs to be collected. Although participants might engage in community development and monitor their impacts if they do not realize the commitments they made to the community or tracking their impact; these assessments were done in vain. GRESB also falsely rewards firms for their actions in pre-development for recognizing potential negative impacts but does not hold them accountable in occupancy and management when those negative impacts could be realized. Also, without the actualized results of these assessments and design decisions, the industry will not have the data needed to prove that it is possible actually to create positive socio-economic results through real estate.

"S"ocial v. Social: The "S" social implication the GRESB assessment focuses on are mostly about the entity level and employee satisfaction, rather than the global social impacts on communities and occupants. The few social indicators that are targeted towards occupants and community members are far too limited and lump health and wellbeing, economic development, affordability, community engagement all into the same question while each of these should be their indicator. Also, measurements on displacement, diversity of communities, cultural/art space, disruption of historic sites, educational opportunities, and resources are not included. In general, this assessment barely touches on the much more in-depth study developers need to be doing.

Sector v. Peer: GRESB ranks all participants into sectors by property type, e.g., residential, office, retail, industrial, and diversified. Therefore, multi-family developers working on luxury market-rate high rise projects and LIHTC affordable housing developers are lumped into the same category and compared. Not only is this a misrepresentation of the categorization, but it also does not offer entities who intrinsically develop properties that are more socially oriented additional points for their work. This becomes an obvious issue when the two highest-ranked residential entities are AvalonBay and Greystar Realty, while a firm like Jonathan Rose Companies, which is primarily an affordable housing developer, is not.

These issues apply to all existing ESG models and not specifically targeted towards GRESB. However, these problems are particularly concerning as the "ESG" sector is developing and could quickly become a misrepresentation of what true environmental, social, and governance value is. This is troubling because more public and private funds are terming themselves as impact funds investing based on ESG. Therefore, if firms are given false positive ESG ratings when their real impacts are negative, they will receive funding through impact funds. In the same vein, if funds term themselves as impact funds but want to receive the same financial returns, they could manipulate tools like GRESB as a way to validate they are investment thesis. For example, these funds could invest in the same firms they traditionally would have invested in, which now have inaccurately high ESG scores, and claim they are investing in them for environmental or social reasons to satisfy policy or investor relations. Also, consumers unaware of the methodology of ESG ratings could be falsely advertised too by companies with "positive" ESG ratings.

Other Models of Impact Metrics

The real estate industry needs better metrics and processes to measure actualized social impacts created by development in addition to pre-assessment tools. It is the actualized impact measures that will allow us to hold developers accountable for their actions as well as praise those firms who create true positive impact. To do so, we need to recognize these critical components.

Third-party non –biased agency: The entity that scores real assets and developers needs to be a third-party group, whose sole responsibility is to report impact for the community and occupants accurately. By holding the agency responsible to the end-users rather than the investors or developers, it will ensure bias from the sector does not affect the accuracy of impact measures.

Larger the entity, the more points: Unfortunately, due to the reporting and certification aspect of ESG, larger entities are more likely to have the resources and human capital needed to fill out paperwork and file reports to increase their ESG ratings. While smaller entities who may be producing much more significant impact, do not have the same capabilities. To mitigate said issue, it is crucial for rating benchmarking to be done at not only the asset class, and location level but also by the scale and program use. Therefore, large companies and small companies can be compared to their true peer organizations.

Centralized and contextualized system: Through the interview process and researching socially-oriented developers, it is clear that many organizations are partnering with academic institutions to research specific impact issues. As an illustrative example, an affordable housing developer in Boston partnered with the Harvard Public Health School to study the effects of design and materials on their rehab affordable housing project to measure the health implications of their work. These initiatives are happening around the globe and provide an excellent foundation for localized data and methodology. However, a global entity needs to look to all these fragmented studies to compare and consolidate the processes and lessons learned about the drivers of social value that can support sectoral learning and transformation at the product level.

Stronger and cross-industry metrics and processes can measure the realized impacts of development at the product scale and create a more standardized method for comparing developments.

Some groups are attempting to build the foundation of such tools. One noteworthy example is the Real Estate Developer Index (REDI). REDI is self-described as a *"value-based platform that evaluates real estate developers and furthers their community contributions*." REDI's formula is to use Knowledge & Education + Better Development + Investment & Policy Changes = Displacement-Free Development. REDI uses a unique technique of transparency and empowerment to allow all stakeholders to "rate" a developer. To do this, REDI will compile a jury of individuals from real estate, private equity, community organization, academia, government, law, and non-profits to rate an individual developers' profile. This compiled investigation will lead to a group score; in addition, REDI rating metrics will look to past projects to measure the proposed project at hand. Not only does REDI create a rating, but it also creates a platform of accountability in which the community can provide feedback to developers to ensure that the commitments made in pre-development are realized. (REDI)

Although REDI is in its initial days of development and will need time to acquire critical mass and acceptance from the sector, it begins to create an ecosystem of metrics that hold developers accountable for their actions. A key component that differentiates REDI from GRESB is that REDI engages will local stakeholders to understand the needs of their community and have them be a part of the rating of developers. By giving power and voice to the community, REDI innately will have more accurate scoring of realized impacts as it is the community who are living with these impacts daily.

The tools used to rate developers on their "S" outcomes give us insight into how and what the industry is valuing. These tools not only rate developers but also influence how the industry develops. They also provide a signal to the sector of the most important issues they should be addressing. Therefore, the GRESB assessment and results will be checked against the information collected in the developer interviews and other literature to see if these resources align or deviate from one another.

Chapter 3: The Profiles

A handful of developers are already reimagining the traditional way of development, instead centering positive social impact alongside financial value. From these developers, we can learn what has worked and where are the challenges in achieving deeper social impact through development. This chapter details the five interviews I conducted with developers, who are currently developing real estate projects with a commitment to positive social, environmental, and economic returns. These interviews explored the developer's perspective on the development process, social impact goals, and the implementation and metrics of said goals. In addition, each interviewee defined what social impact in real estate means to them, and ranked where their firm and the industry currently stand towards realizing that impact.

The development projects discussed in the interview range from an 8-bedroom single family home renovation to a 161-acre master planned community. The firms interviewed span over both coasts, and represent a wide range of perspectives. The individuals who I spoke to at each firm also range in positon, from development manager to a founding partner. This variety led to diverse set of findings on the best ways to implement social impact goals through real estate, and lessons learned from those who are already pushing the envelope.

In addition to the qualitative information each developer shared with me, I also asked for any metrics they use to monitor and evaluate what impacts a development project created. These metrics were measured by the developer, rather than from a rating agency or local stakeholders. Although such data was limited, there are examples that illustrate that many of the impact metrics the developers defined were achieved.

Although limited to just five interviews, each one of these profiles will help us analyze the existing practices for developing projects with positive social impact and if there are shared goals and definitions for social impact. Each interview is summarized into two frameworks as described in the Methodology and Framework section. The frameworks are used as tools to keep all the data consistent, and easy to digest. The inspiration behind the framework is from the UK Green Building Council Social Value in New Development Guide, and provided a strong base to expand my interview methodology and framework from.

UK GBC, Social Value in New Development

The UK Green Building Council (GBC) Cities Programme released in March of 2018 in their *Social Value in New Development: An Introductory Guide for Local Authorities and Development Teams*. This guide was a leading inspiration in the real estate development framework I created for my interviews. The guide and city program designed by UK GBC is in response to "*a momentous shift in our expectations of businesses, with organizations under increasing pressure to demonstrate their contribution to society*." (UK Green Building Council, p. 4) It was also done as a tool for developers to reference when developing more sustainably, and for local authorities to reference when comparing developers on their social value outcomes. This subject is specifically relevant in the UK as the 2012 Public Services (Social Value) Act, was passed which makes it a requirement for all public sector contracts to consider the social value created by all the competition. (UK Green Building Council, p. 7) This act legalizes the responsibility of the government to consider the social impacts of the contracts they award. Although this only applies to government contract work, it signifies the changing business landscape that recognizes the importance of the social outcomes of business. Due to the Social Value Act, many developers and officials needed a guide on how to compare social outcomes of contracts.

This guide starts with highlighting the importance of developers to engage in local stakeholders during the early stages of the development process and throughout the project lifestyle. The figure best illustrates how the UK GBC considers the different levels of involvement of stakeholders leads to better social outcomes.

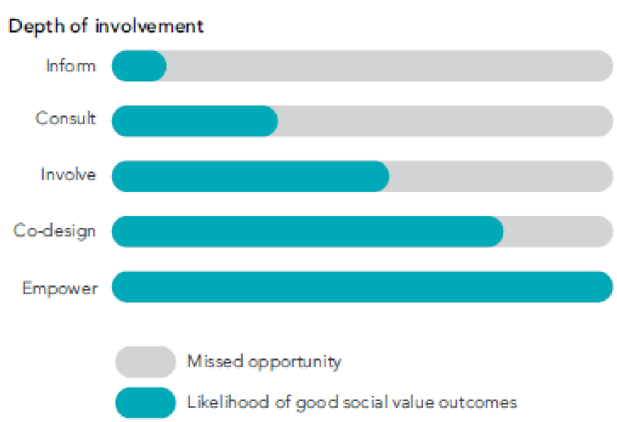

Figure 16: Local Stakeholder Involvement (UK Green Building Council, p. 8)

The guide then sets forth three broad impact themes: jobs and economic growth; health, wellbeing and the environment; and strength of community. The guide uses these three schemes to organize the frameworks but recognizes that the local context will define the specific impact themes needed. The guide then lists the development phases as investment, planning, design, construction, and operation. For each of the three impact themes, the guide creates a different road map that lists the top goals, and what specific steps are needed to ensure those goals are met. The framework lists the different phases of the development process and highlights at which phase these steps should be implemented. Lastly, each roadmap has three case studies of real estate projects that successful realized the goals listed.

These roadmaps in the UK GBC guide were unique in their illustrative and straightforward way of representing how impact goals relate to the development process. With each phase of the process highlighted by a dot with a coordinating step, one can quickly read what needs to be done in the planning phase to realize the impact outcome. It also very highlights the overarching goals of a project and then more explicitly lays out all the steps needed to achieve the goal. This roadmap became the base of the more expanded real estate development framework described in the methodology and framework section.

The guide ends with a list of barriers to driving social value in new development. The two barriers that are most important to this thesis is the inconsistent understanding of social value and difficulty in measuring social value. The first barrier addresses the global issue that social value is not understood or agreed upon by the entire industry, or by the local authorities. Due to this, there is also a misunderstanding of the actual depth of impact real estate has and all the potential positive impacts it could create. The second barrier speaks about the lack of tools or standard methodology used by the industry as a whole to measure the social value of real estate. Without a universal tool, there is no way to compare projects and developers and hold developers accountable for their created impacts.

Profile Methodology and Framework

Based on the UK GBC Social Value in Development guide, I created two frameworks that cover the overarching questions I had for the developers I interviewed. These two questions are: What does the development process look like when developing a socially oriented project? How do these developers define social impact, and how do these firms compare to the rest of the industry? These two questions, stemmed from my research as I realized that the difference between socially-oriented firms and traditional firms is not just the type or program of their projects, but the process and goals the developers take to develop their projects. By understanding when and how these firms use the development process to achieve their impact goals, we learn the critical points in the process that result in the desired impact. The second question came about due to ambiguity and often overuse of the word "impact." As there is no universal definition for the industry, it was vital for me to hear from self-defined socially-oriented developers how they define social impact in real estate. This allows us to see if there is a shared or standard definition for the term. In addition, it is essential for all five firms to state where their work is in comparison to the rest of the sector. By doing this, we can understand how much of a difference in approach and mentality the rest of the industry has in regards to these socially-oriented firms.

Due to the relative newness of the subject in the academic and professional setting of real estate, I choose to do my research through interviews with specific firms who were already engaged in socially oriented real estate development, as defined by their websites, company mission, and existing portfolio. Also, interviews with developers who are actively involved in the industry throughout the United States grounded the research in the reality of the current development context. All interviews were done with firms practicing in the United States, which was done to focus the scope on a domestic setting. However, most of the research applies to the international context with the caveat of local, state, and federal agencies specificities. All firms interviewed are "for-profit" businesses; this was an active decision in order for all the firm's financial models to be compared equivalently. Also, it allows us to compare these firms to the rest of the industry, which is predominantly for-profit enterprises. It is important to note that the non-profit development community is doing incredibly impactful work throughout the United States, particularly in regards to affordable housing. However, often the sector segregates the social impact work to the non-profit developers, as a way of furthering the misconception that it is financially infeasible. However, these five firms and many others are examples of developers who are managing both their financial and social returns.

All interviewees are currently working at the development firm being discussed, and typically manage the project described in the framework. I connected with these specific firms through my research, personal and professional connections, and the MIT Center for Real Estate Alumni network. Each profile beings with a description of the firm and interviewee, how I connected with the firm, and key factors that influenced the framework.

The first framework, the real estate development process framework, is about the development process and implementation of the project impact goals. See Figure 17 for an example framework; in the example, the goals and steps directly come from the UK GBC framework, and the metrics are fictional facts to illustrate the purpose of the framework. This framework expands on the framework created by the UK GBC framework discussed previously. The framework begins with the name of the project and developer, as well as a brief description of the project. This description typically contains the uses of the project, total square footages, project partners, as well as type of financing used. The left bar labeled, **DEVELOPMENT PROCESS**, contains the six development process steps in order, as discussed in Chapter One. Each step has a coordinated color bar when a specific step was implemented during that phase; the respective color dot is displayed on the bar. Many steps are performed in multiple phases, and therefore more than one colored dot will be next to the step. In the grey bars, labeled **GOALS** are the primary project goals. These are the overarching project goals the firm set for the project. Underneath each grey bar list, the specific steps the firm took in order to realize the above goal. The right bar, labeled **METRICS,** contains the specific measurement used to prove that the coordinating step to the left was accomplished. If an actual quantitative number is given, that number is bolded. Not all steps have a coordinating metric based on the nature of the project and the developer's goals.

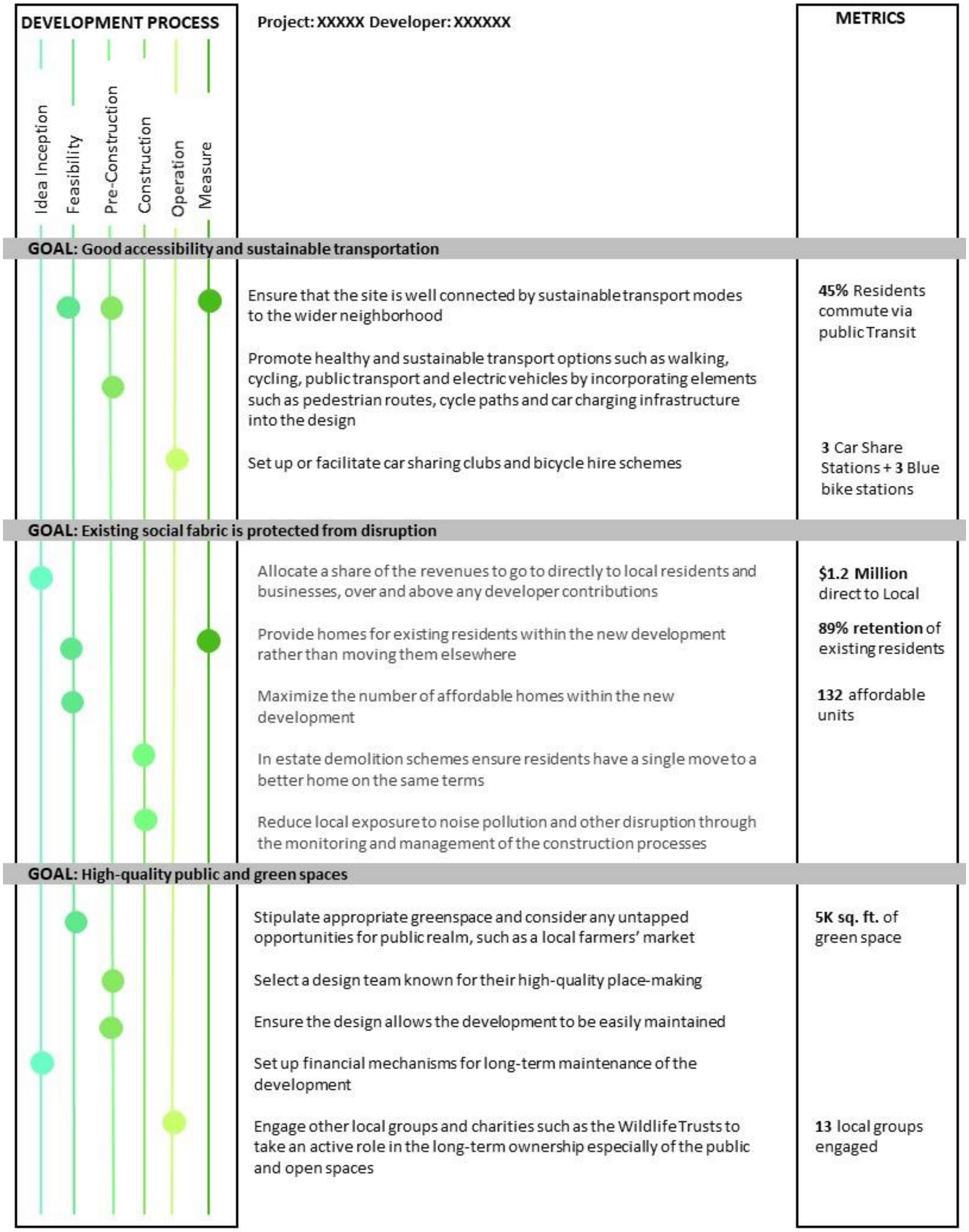

Figure 17: Real Estate Development Process Framework

(Graphics: Nicole Zaccack, 2019 Text: UK GBC)

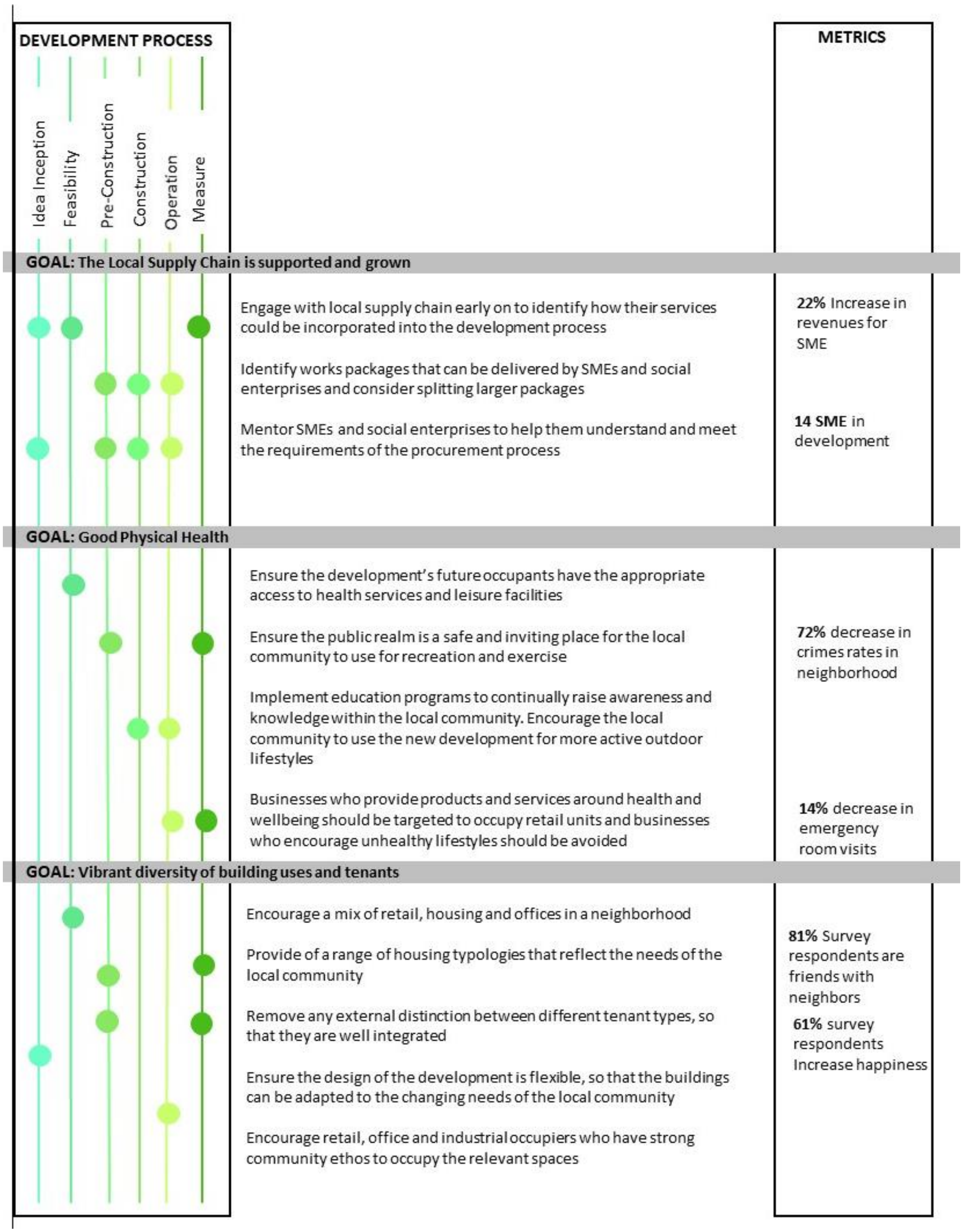

Figure 17: Real Estate Development Process Framework Cont.
(Graphics: Nicole Zaccack, 2019 Text: UK GBC)

The second framework, the spectrum of social change framework, is used for each of the interviewed firms to place themselves in terms of development that creates social change in relationship to the rest of the industry. See Figure 18 for an example framework. The framework contains a spectrum of social change with ticks, representing locations on the spectrum. The tick furthest to the left represents zero social change created; the tick furthest to the right represents the highest level of social change created. Each interviewee was asked to place their organization, the industry as it currently stands, and where they want to see the industry in the future on the spectrum. The three categories are represented by different color dots, seen in the example below.

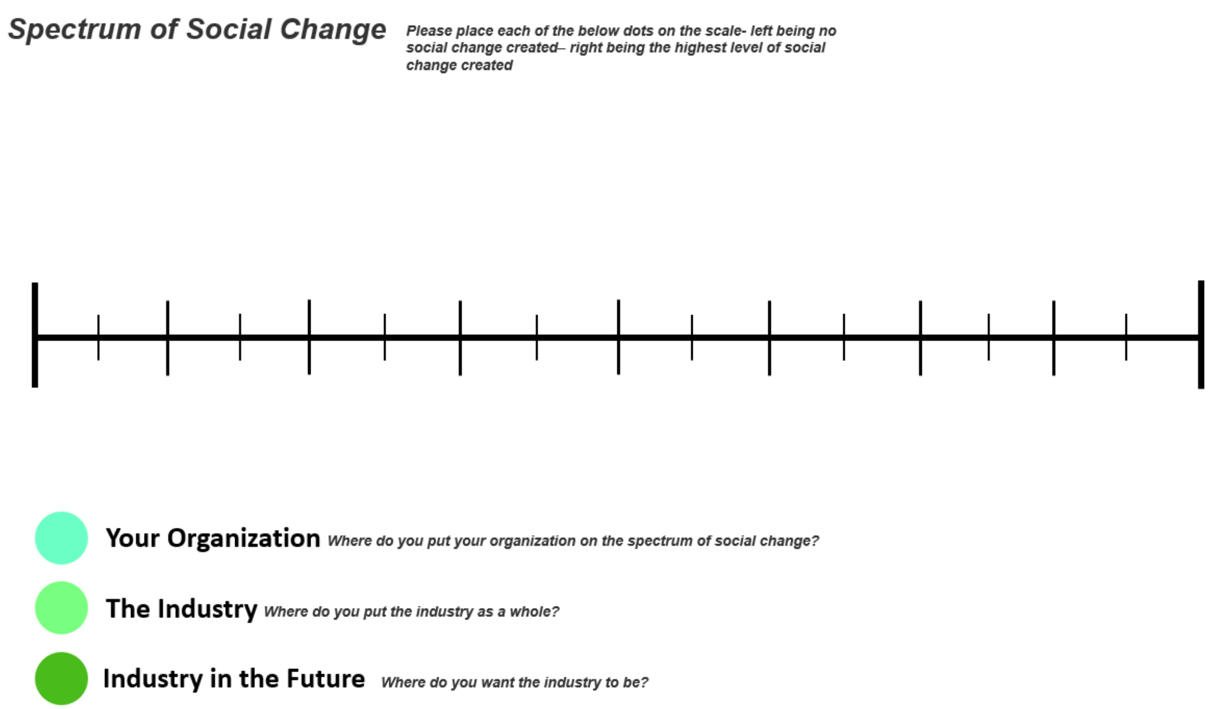

Figure 18: Spectrum of Social Change Framework
(Nicole Zaccack, 2019)

I then asked all interviewees the same two questions: ***What does Social Impact in real estate mean to you?*** And ***What does the Industry need to do in order to shift to the right of the Spectrum?*** Each interviewee's responses are quoted below the question.

After the two frameworks and questions, I discuss additional key findings from the interview. All the content in the below interview sections was gathered during my interviews unless otherwise noted, while direct quotes from the interviewees are in quotations and italicized. All interviewees were given the two frameworks in advance of the interview.

Limitations and Assumptions

These interviews have some apparent limitations, the first being all information was given form a personal recollection and taken at face value. I did some verification of the facts listed in the interviews; however, the information provided comes from the perspective of the interviewee and, therefore, intrinsically may have a bias. The number and scope of the interviewees are also a limiting factor. With just five interviews, based on firms in Baltimore, New York City, Boston, Durham, and San Francisco, there is a numeric and geographical limitation on the breadth of the conclusions. Each city, state, and community has a unique context, and one cannot make such broad generalizations about what process works in one local will work in another. I use this small sample size as case studies to illustrate how specific developers are created projects with positive social returns. I am particularly aware that this study does not include a developer from Mid-America and therefore missing the perspective of a significant force in the real estate context.

In addition, many of the developers interviewed were transparent in stating their goal setting, and development process were not as formal or intentional as the framework was leading them to be. Due to the structure of the framework, it may have set up the developers to be overly explicit in their goals and steps. I particularly noticed this when I asked developers about specific metrics used to quantify their realized impacts, and in many cases, the developers did not have an answer. The spectrum of social change framework also is an objective framework in terms of the magnitude of impact as the developer's self-selected their position on the spectrum, as well as the industry, their position very much was determined by their perception of their work compared to their known reality of the industry.

Another major limitation of these interviews is that they only tell the perspective of the developer when the project included many stakeholders, including the investors, politicians, contractors, architects, non-profit partners, and, most importantly, the community. The voice of the community or those directly impacted by the project is the essential perspective missing. As the developer can say that this positive impact was created, and here is the specific metric that proves it, these facts mean little if the community does not realize the benefits. Also, the developer may have the wrong impression of what the community needs or desires and therefore producing the misguided projects. Every single developer interviewed does discuss the importance of active engagement with the community, however a future study that compares the developer's and a community member's perspective on a specific project would be very telling of the real impacts of the project.

Lastly, as every one of these developers has acknowledged, none of them views their existing development process or projects as perfectly embodying the full social impact they'd like to achieve. These selected developers were not chosen because they or I believe they are developing projects that are creating the maximum positive social impact possible. Instead, all these developers are trying and actively pushing the traditional model of real estate forward. Each of these firms likely also created some negative externalities; some are spoken about here; likewise, each is continuously changing the way they are developing.

I have made the following assumptions throughout all five of the interviews. First, in the real estate development process framework, I assumed as to which phase of the development process, each of the listed steps falls under. In some cases, the interviewee explicitly states the phase of the step, but in most cases, I assumed as to which phase it was best related too. Secondly, in the real estate development process framework, unless the metric has a bold number or text, the metric is a possible way of measuring the effectiveness of the step. All bold metrics are quantitative or qualitative data given to me by the developer. For example, "***1 million visitors** per year*" is an actual metric given to me by the developer. While a "*greater sense of safety*" is an assumption of a possible way to measure said step. Often the developer and I discussed how the step could be measured even if the specific data was not yet available. Lastly, I assumed that all steps taken by the developer would be completed. Some of the projects in the framework as still in the feasibility or pre-construction phase; therefore, the developer has specific goals and steps planned for the project. However, there is always the potential for projects to change as they enter the construction phase.

Profile: Seawall

Seawall, a real estate development firm based out of Baltimore, Maryland, came to my attention through research about socially oriented work being done around my hometown of Washington, DC. The work done by Seawall and co-founder Thibault Manekin illustrates how a founder's career path and values frame the vision of the firm. (Manekin, Thibault) Manekin, career started with an international journey focusing on peacebuilding through sports. During his years of international work, Manekin began to realize the depth of issues the United States was facing and that the real estate sector is both the most powerful and connected sector, yet often used to divide people further.

About Seawall

The vision of Seawall was formed as a way to reimagine the sector as a tool to empower and unify communities. Seawall was founded in Baltimore in 2007 with the understanding that the role of the developer is primarily to listen to the community to build a great environment and realize their dreams. To quote the website, "*Seawall believes in re-imagining the real estate development industry so that the built environment empowers communities, unites our cities, and helps launch powerful ideas*." (Seawall) Focusing on underinvested neighborhoods in Baltimore, Seawall develops mixed-use projects ranging from affordable housing to local retail, to education, to office. Through these mixed-use projects in dense areas, Seawall creates 24-hour activation and reinvestment in communities.

Remington Row, Mixed-Use Multi-Block Development, Baltimore

The project Remington Row was developed in Remington, a neighborhood of Baltimore, Maryland. Manekin shared with me that the neighborhood of Remington had experienced no new financial investment in roughly a decade. The community of Remington was working on a masterplan to reimagine the future of the neighborhood and identified three blocks of Remington Ave as a potential site. What was once the soul of the neighborhood, was now a mix of vacant, underutilized warehouses and industrial yards. Through community engagement and partnership, Seawall set specific impact goals they hoped to realize through the development of Remington Row.

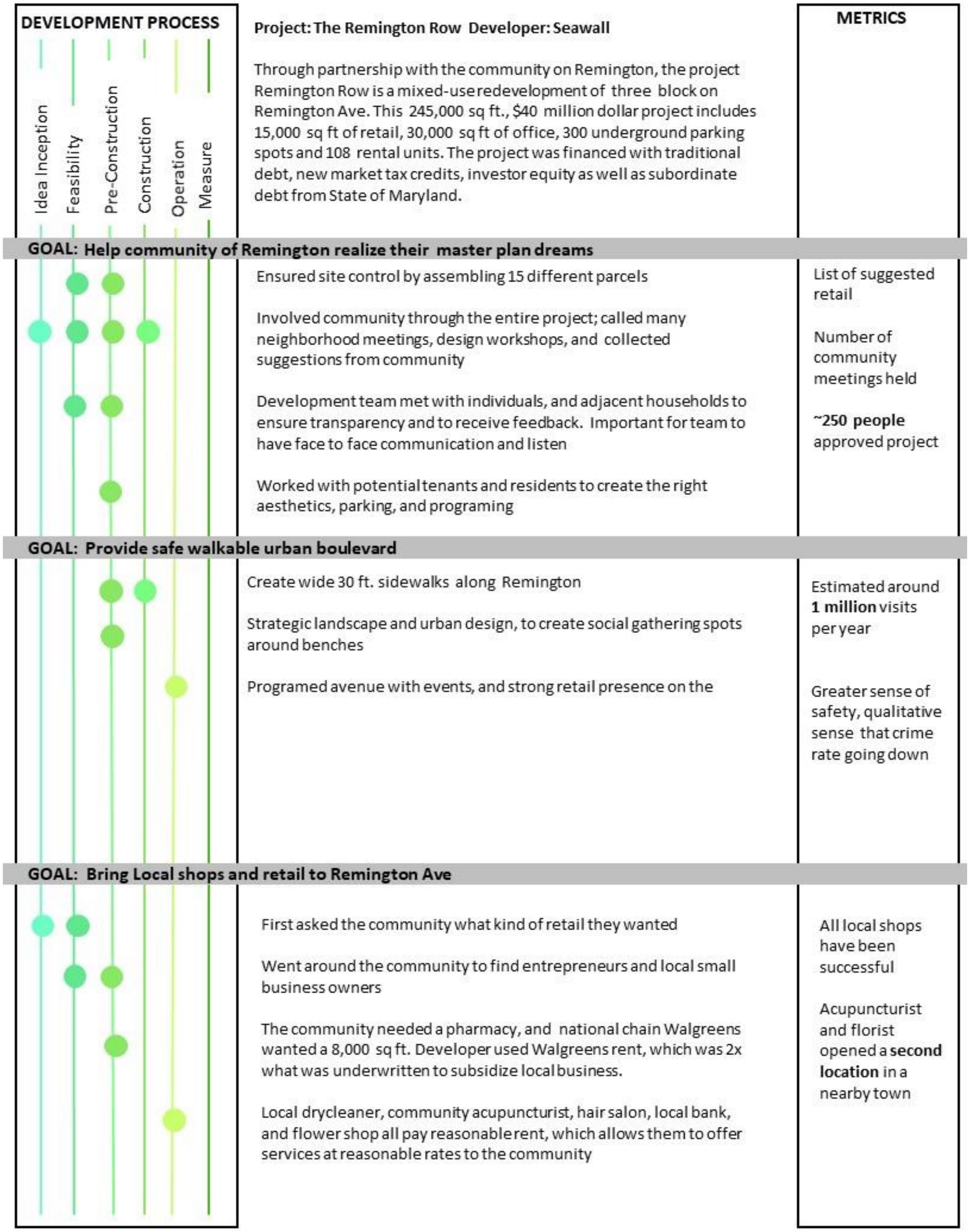

Figure 19: Seawall Real Estate Development Process Framework

(Graphic: Nicole Zaccack, 2019 Text: Manekin, Thibault)

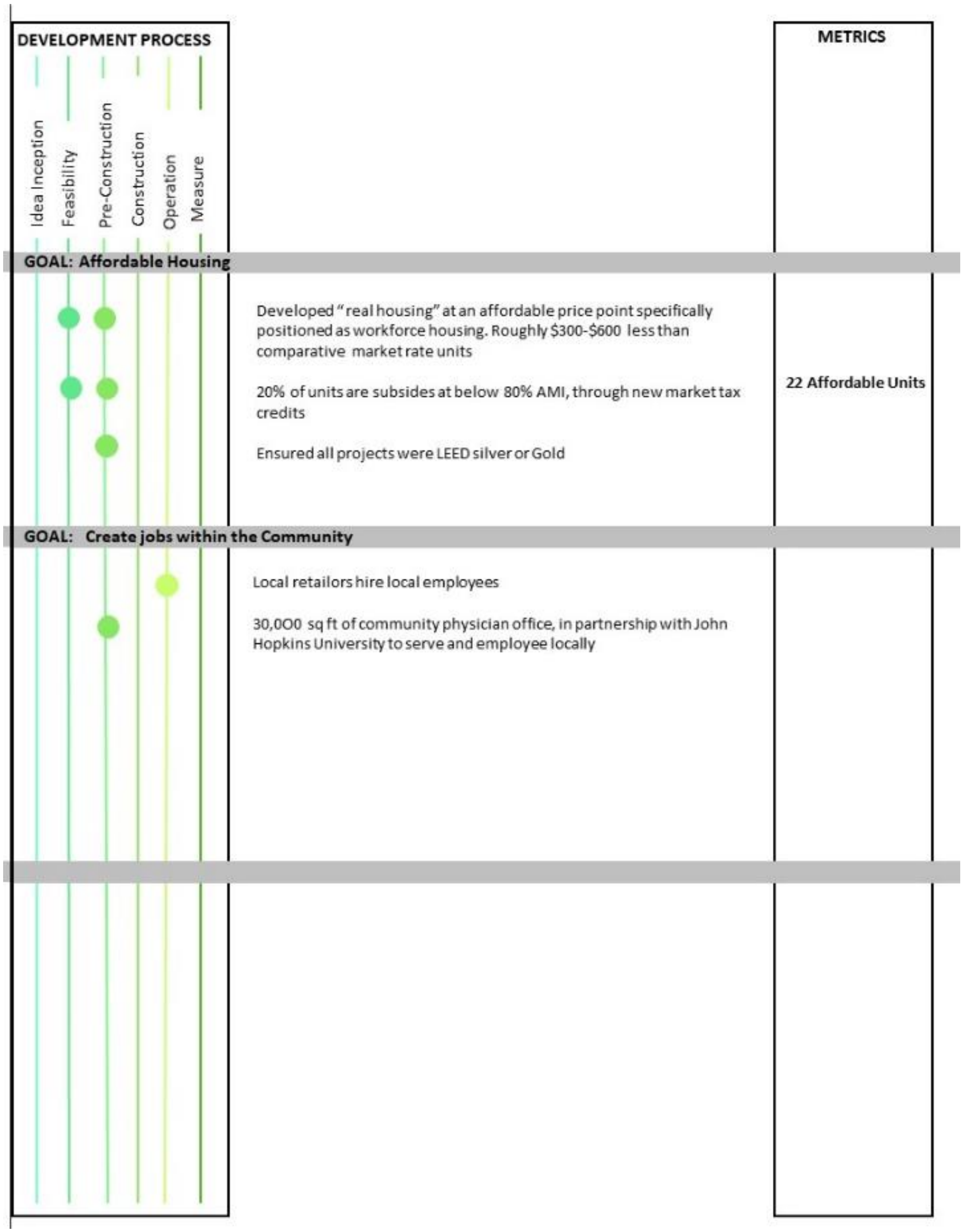

Figure 19: Seawall Real Estate Development Process Framework Cont.

(Graphic: Nicole Zaccack, 2019 Text: Manekin, Thibault)

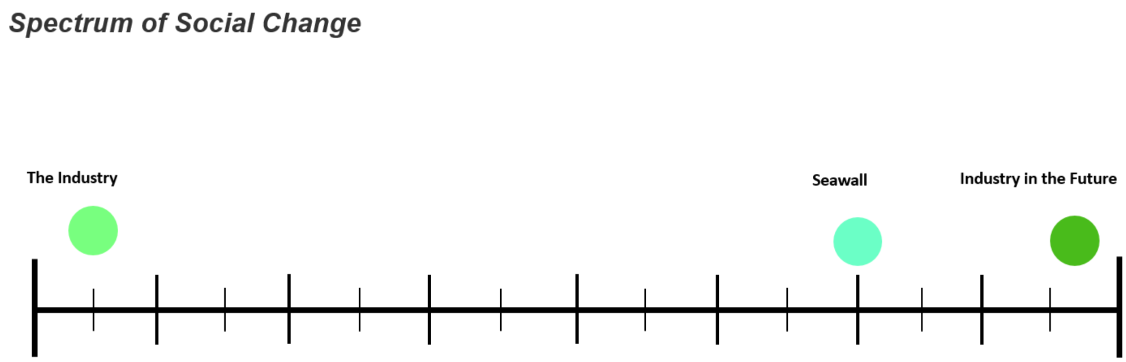

Figure 20: Spectrum of Social Change Framework
(Graphic: Nicole Zaccack, 2019 Text: Manekin, Thibault)

What does Social Impact in real estate mean to you?

"Shifting the power dynamic where the developer exists to help a community realize their dream in the built environment."

What does the Industry need to do to shift to the right of the Spectrum?

"*I think a lot of it will come organically as a new crop of developers understand how they think real estate should be used to further social change. These developer's priorities will shift the industry somewhat naturally.*"

A key challenge discussed by Manekin is the financing of socially-oriented projects. In the initial days of development, Seawall had difficulty finding financing that supported the work in Baltimore. In the past, Seawall typically did not use equity, instead financing their work through historic and new market tax credits. However, in recent years, local high net worth families have approached Seawall with interest to invest in their projects. These families have a personal interest in seeing the revitalization of neighborhoods that they once lived in; for this reason, often the equity does not have the same standard of return on investment as traditional equity would. When asked about the financial returns of projects and whether specific financial goals are set for Seawall projects, Manekin describes the need for projects to be financially viable as more a benchmark. Seawall's focus is to meet its social objectives while balancing their financial feasibility.

The work Seawall is doing has gotten a lot of attention from fellow developers and city governments in other areas, which indicates that others are excited and interested in doing similar work. However, Manekin believes the Seawall model is not solely a Seawall idea, but something every developer and city should be doing. Or, as Manekin eloquently puts it, "*all cities should feel a responsibility to roll out the red carpet for its residents doing important work."* (Manekin, Thibault) Seawall is more than happy to share their approach to development with other firms, whether through consulting or sharing past lessons. This view on development further shows the shift from developers like Seawall, whose overarching desire is to change the industry.

Another critical success of Seawall is the team's direct engagement with the community and putting a face to the developer. In the pre-development of Remington Row, for six months, Manekin went out every night to meet with the individuals in living adjacent to the project. Manekin describes, "I sat on stools in living rooms and kitchens. Mostly just listening and asking residents, "how long you have you lived here?", "tell me about Remington?" "If change were to come on your terms, what would that look like?" This community involvement was key to the success of the project.

Finally, Manekin made a note of unintended consequences and externalities of every development. Despite the incredibly active role the developer had with the community and engaged approach to development, Seawall was still investing millions into real estate into a neighborhood that has previously received little financial reinvestment in the built realm. The reality of the investment in Remington leads to displacement, particularly of those most vulnerable such as renters. After the success of Remington Row, surrounding landlords who did not share the same values as Seawall took advantage of economic growth. Manekin describes how landlords "*saw the neighborhood changing, and people wanting to move in and the ability to double, triple, or quadruple rents. And those families who have been there for generations are now facing displacement*." (Manekin, Thibault) Seawall's leadership takes this situation very seriously and are actively working on mitigating displacement in the future. Looking back, Seawall wishes they had thought of a strategy, such as a community land trust, to secure the surrounding neighborhoods to prevent such displacement. Moving forward, Seawall plans to be even more thoughtful of land governance and site programming.

Profile: The HYM Investment Group

The HYM Investment Group (HYM) is well known in the Boston area, as they are currently developing two of the largest projects in square footages in the area (Bullfinch Crossing and Suffolk Downs). HYM has offered project tours, and members of the team have attended studio reviews at the MIT Center for Real Estate. Development Associate, Sara Li, is also an alumnus of the MIT Center for Real Estate and Masters of City Planning program. (Li, Sara) The work of HYM has always interested me as they take on large masterplans that integrate many different stakeholders.

About The HYM Investment Group

The HYM Investment Group was founded by Tom O'Brien, who also led the Boston Redevelopment Authority from 1994-2000. HYM mission is described on their website as "*Creating and unlocking value for our investors while improving communities*." (The HYM Investment Group) HYM currently is developing nine million square feet of mixed-use development in the Boston Area alone. HYM is known for its large urban projects and deep-rooted relationship with the community and public agencies in the area. One of HYM's most significant projects is Bulfinch Crossing, a redevelopment of the government center garage into a 2.9 million square feet mixed-use project. This project includes six buildings with over 8oo residential units, a boutique hotel, 1.15 million square feet of office, and 82,5000 square feet of retail. As a testament to HYM's coordination with the city and community, the project was approved by the BRA and BZC unanimously.

Suffolk Downs, 161 –Acre Mixed-Use Development, Boston and Revere

The project Sara Li and I discussed is the massive redevelopment of Suffolk Downs, a 161-acre site spread between East Boston and Revere. Suffolk Down was an underutilized horse racing facility being redeveloped by HYM into a transit-oriented mixed-use development. The entire master plan equates to 16.2 million square feet of development, which will be developed over 20 years in 10 phases. HYM received its special permits from Revere in 2019 and will be starting construction in 2020 on phase one of the project. For the past years, HYM was deep in the pre-development and approvals process; however, Li discussed the master plan of Suffolk Downs as a whole in the framework below.

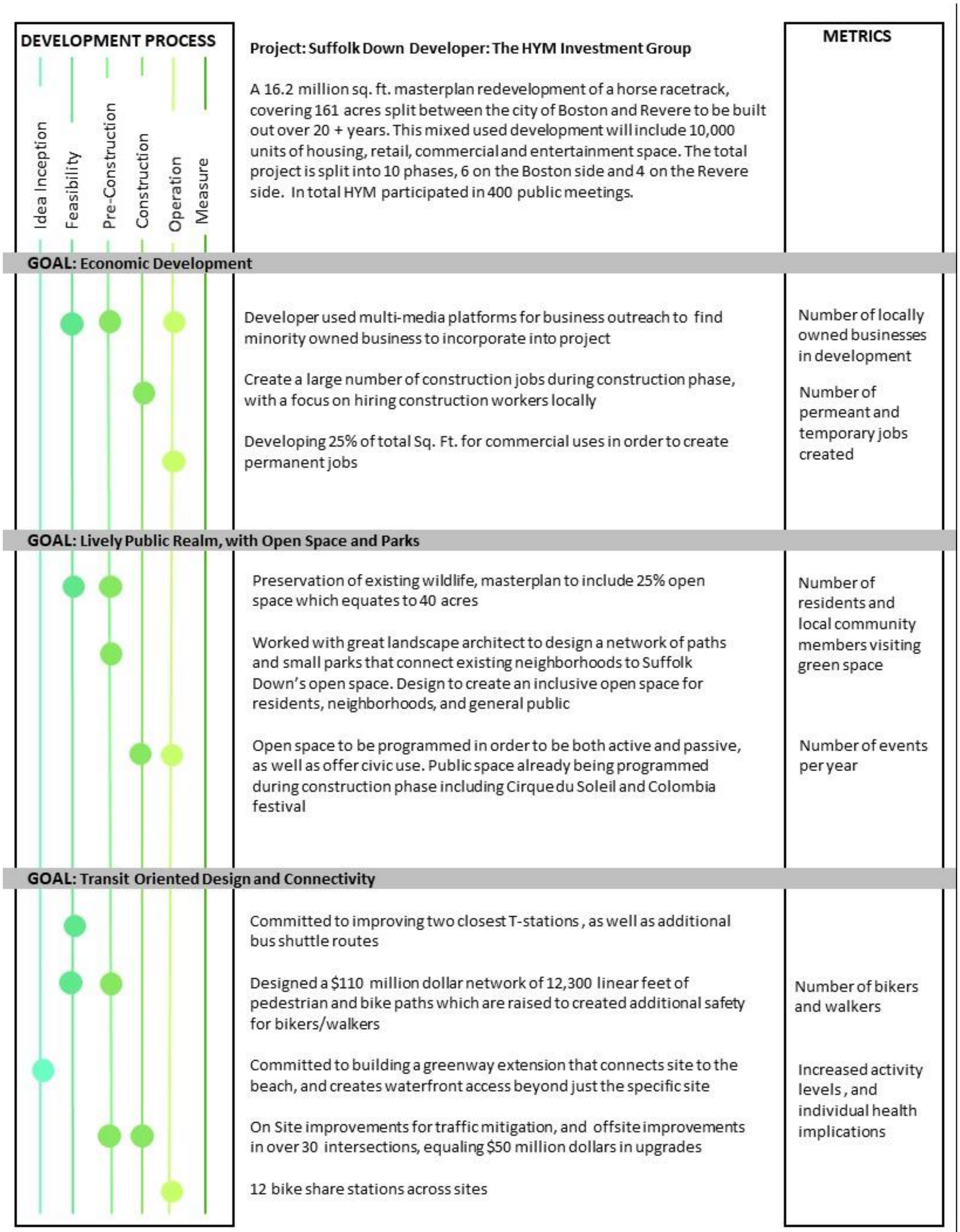

Figure 21: HYM Real Estate Development Process Framework

(Graphic: Nicole Zaccack, 2019 Text: Li, Sara)

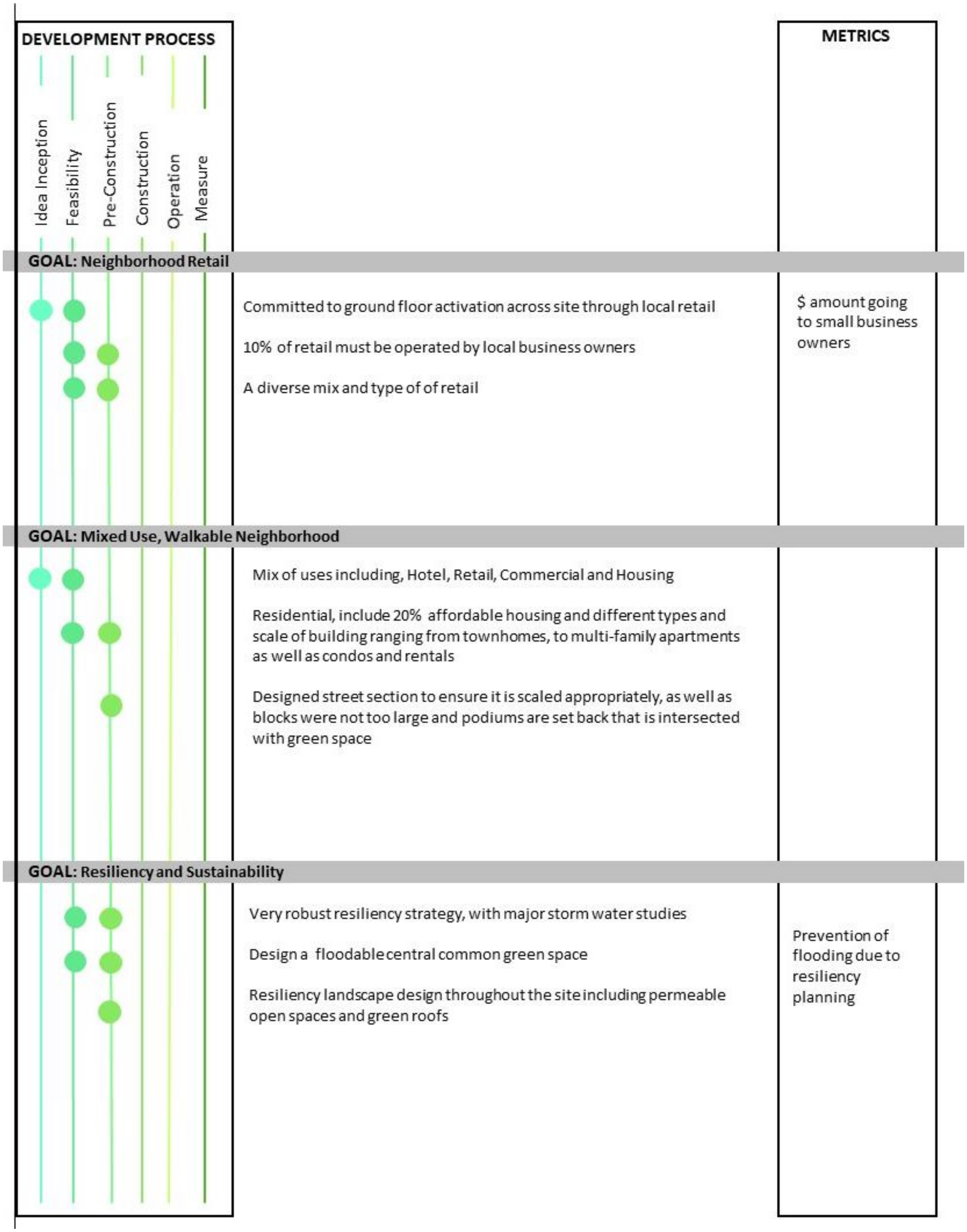

Figure 21: HYM Real Estate Development Process Framework Cont.

(Graphic: Nicole Zaccack, 2019 Text: Li, Sara)

Spectrum of Social Change

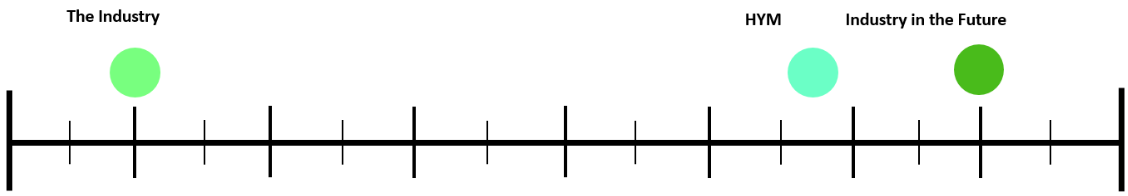

Figure 22: HYM Spectrum of Social Change Framework
(Graphic: Nicole Zaccack, 2019 Text: Li, Sara)

What does Social Impact in real estate mean to you?

"As real estate developers, we are in massive positions of power. Often we feel we need to provide results and returns for our investors, but we should feel that same level of accountability towards the community. We should use real estate as a way to address social impact issues. Social Impact in Real estate means improving the positions of local stakeholders by improving the built environment as a place to live for people and to be more responsive to our earth."

What does the Industry need to do in order to shift to the right of the Spectrum?

"The key to getting the industry to shift on the spectrum of social change is the need for more diversity. Having different social and racial backgrounds offers a diversity of experience and perspective on real estate teams. Also, having more academic institutions and master's programs focusing on real estate will allow the sector to reflect critically on the current context and innovate."

My interview with Li also leads to some additional interesting findings reported below, particularly with developing a project at this scale. Since HYM is developing such a large scale project, it allows them to make broad community decisions. As they are grappling with such enormous urban scale challenges, one team is planning transportation, open space, community facilities, and housing. In addition, because the project is so large, it is getting a lot of news and scrutiny. With this amount of power, HYM made the active decision to engage with the community and public agencies to ensure the best possible outcome. HYM met with a lot of business leaders, schools, community groups, and nonprofits, as Li put it, "*anyone who reached out, we meet with them.*"

HYM specializes in large complex projects or sites too complex for a typical developer. Also, HYM is not in the business to just build and sell, but rather long term holders of their development projects and therefore have even more incentive to ensure the prosperity of the project. The length of time it will take to build out the project also lends itself to further testing and iteration. For example, HYM is building their first Cross Laminated Timber (CLT) building in the first phase. This innovative idea is being tested to see how successful it is, and then HYM can incorporate CLT in future phases. This ability to test out ideas is unique to projects of this scale.

In regards to the phasing of projects, Li provided a bit of qualification to the six phases laid out in the framework. The ideation phase was reasonably short, as this opportunity presented itself, and HYM knew they had to act fast. The team did a quick analysis and moved forward in the project into the feasibility phase. Instead of the pre-construction phase, HYM calls this phase permitting, as it is such a core component to the project journey. Although many people associate permitting with a negative connotation, HYM uses the permitting phase to conduct public outreach. This process is continually in iteration with the design and construction phase, as opinions from the public and cities are incorporated into the project. The permitting process works in harmony with the pre-construction phase and cannot be intrinsically separated.

Lastly, Li spoke to financial returns and the necessity to meet specific financial parameters. HYM develops with financial returns as a baseline metric. Of course, there is a certain level of returns needed for the project to make sense and, therefore, be built. However, once the financial feasibility is achieved, the focus of the project is to achieve the other essential goals set forward by HYM and the community.

Profile: Jonathan Rose Companies

The work of Jonathan Rose Companies (Jonathan Rose) first became known to me during my prospective student visit at the MIT Center for Real Estate, in which Jonathan Rose was giving a lecture on socially motivated development. Through this lecture, I recognized a path in real estate for myself – and have since begun work with Johnathan Rose as of June 2010. This section pulls from my experience working with Jonathan Rose, information available on their website and interviews with two company leaders, Associate Director of Development, Andrew Foley on JRC approach to social impact in real estate and Development Manager, Sabrina Baker on a specific project, Sendero Verde, and the framework. (Foley, Andrew, and Baker, Sabrina)

About Jonathan Rose Companies

Jonathan Rose Companies was founded in 1989 by Jonathan Rose, in New York City is a mission-driven company focused on "*to strengthen communities of opportunity by developing innovative real estate solutions that build value, enhance resilience, and cultivate wellbeing.*" (Realizing Vision with Excellence and Compassion.) Jonathan Rose Companies has preserved or developed over 12,000 units of affordable and mixed-income housing throughout the United States. The firm coined the term "communities of opportunity" to describe their holistic approach to development. That approach anchors on the development of healthy and green buildings with substantial amenity packages result in better life outcomes for residents and the surrounding neighborhoods.

Sendero Verde, Multi-Phased Affordable Housing, East Harlem

Sendero Verde, the specific Jonathan Rose Companies project discussed in the framework, is a multi-phased, passive house affordable housing project in East Harlem. Jonathan Rose Companies, in partnership with L+M Development, won the right to develop this project through a competitive RFP process by the City of NYC. In addition to the 709 units of housing to be developed, the project also includes commercial space and retail on the ground floor, as well as a large publicly accessible courtyard. This project is currently in the final stages of Pre-Construction and is expected to be entirely constructed in 2021.

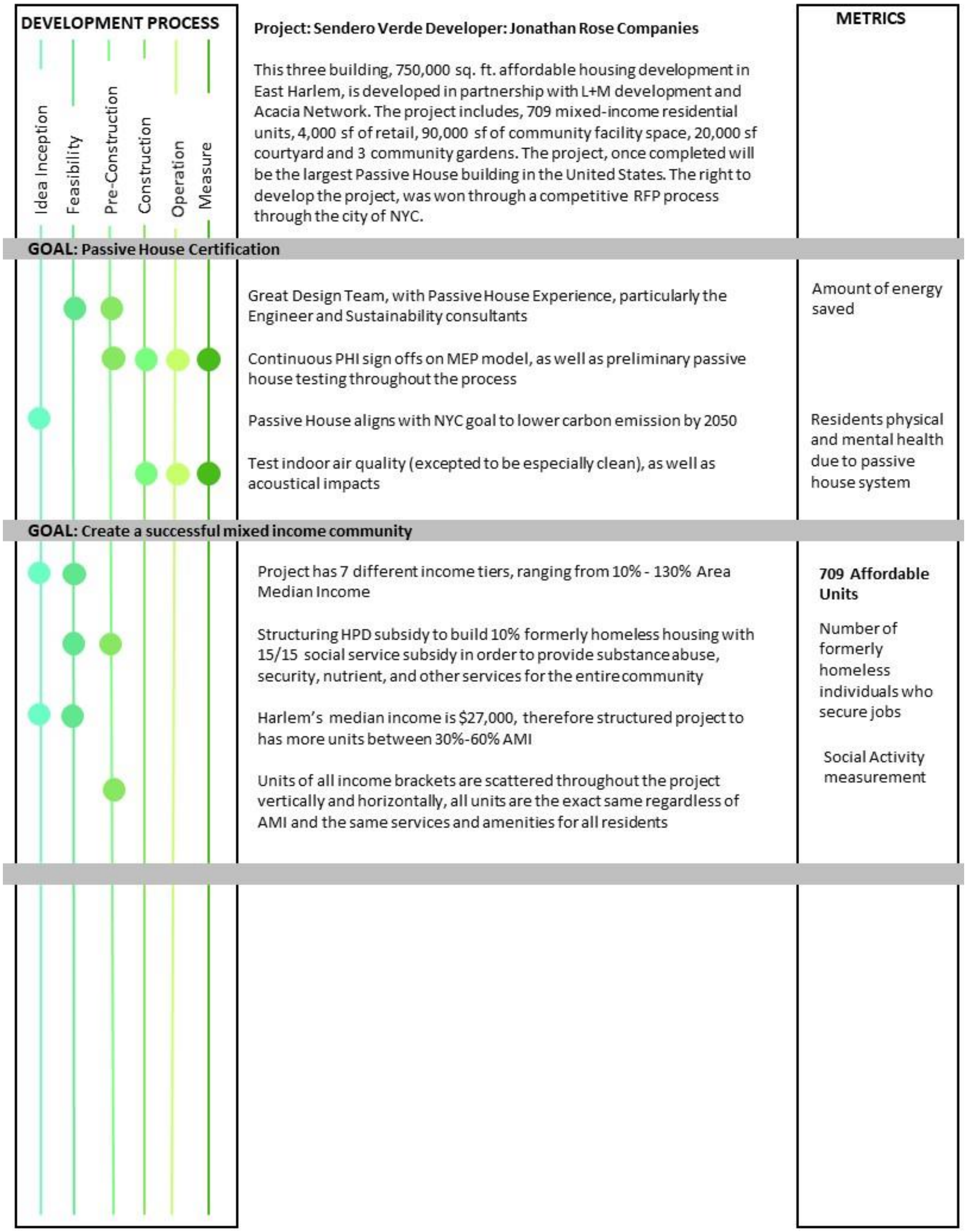

Figure 23: Jonathan Rose Real Estate Development Process Framework (Graphic: Nicole Zaccack, 2019 Text: Foley, Andrew, and Baker, Sabrina)

Figure 23: Jonathan Rose Real Estate Development Process Framework Cont.
(Graphic: Nicole Zaccack, 2019 Text: Foley, Andrew, and Baker, Sabrina)

Spectrum of Social Change

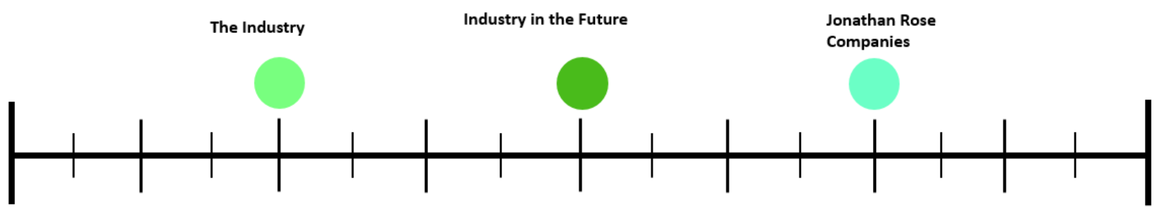

Figure 24: Spectrum of Social Change Framework
(Graphic: Nicole Zaccack, 2019 Text: Foley, Andrew, and Baker, Sabrina)

What does Social Impact in real estate mean to you?

Andrew Foley – "*The built environment has a tremendous impact on the outcomes of the people that inhabit them so real estate has a social impact no matter what, the question is whether it is a good or bad impact. Does it realize a cities highest ideals or fall short? Property owners and developers should feel a great responsibility to build and maintain buildings that allow for healthy, happy lives for their residents. It is a great privilege for a developer to be given a site from the cities, so it needs to be taken very seriously, and do what it can to move things forward. It's not just about if the social impact of a project is good or bad, but is it as good enough, and the bar should be set very high."*

Sabrina Barker – "*Social Impact in affordable housing is about figuring out solutions other than housing that can make a positive impact on people's lives — for example, training our property managers to focus on their residents and building community. These solutions don't have to cost a lot. I think bringing people together so that they have the opportunity to share their resources and experiences is important, and as a developer, helping people create unit communities and be more successful is key.*

I feel that housing is the block in which everything else can be built; once you have secure, safe, and clean housing as basics necessities met, then you can start to improve on all the other aspects. If people are worried about their roof leaking or if they have heat that night, one can't focus on anything else. There's a bunch of stuff in life to worry about, especially if you're a lower-income individual, and housing should not be one of them."

What does the Industry need to do in order to shift to the right of the Spectrum?

Andrew Foley – "*I think the role of social metrics is really important to establish an industry standard. I think that the tool needs to be developed, and we're trying to do our part to contribute to that. The environmental movement in the built world is a great example of how you can do that effectively. Once a common framework is created, the public sector can engage and develop policy around it, and commit money in their budgets towards measuring outcomes. Whether social Impact funds can elect to weigh said social outcomes with their financial returns is to their discretion, but with such a metric, the industry can continue to refine what we need to do to achieve real, measurable outcomes across the whole system. Having metrics is incredibly important, and it's a lot of the work left to do."*

When asked which phase of the project leads to the greatest impact, Foley believes the feasibility and pre-construction that is the key to a highly impactful project. It is these early phases, when initial commitments of funding, program, and the goals of the project are defined. Once these decisions are made and money is spent to execute said ideas, it becomes increasingly more expensive and, therefore, difficult to change or refine the goals of the project.

Foley also notes the importance of public agencies in creating social impact in the real estate sector. Particularly in the Request for Proposal or RFP process, as it is the RFP application that lays out the development goals for the project and direct developers towards specific targets. This is a powerful tool public agencies can use, particularly if they have control over land. By setting out specific parameters and a vision for a site via an RFP, the agency can ensure the developer creates a project that is explicitly meeting a need of the community. In addition, public agencies also set the parameters for grants, and subsidies developers can apply for to develop. For example, a city can adjust the percentage required of formerly homeless units for a specific subsidy, if the city wants to see further development of formerly homeless units. Although the city and public agencies do have a considerable role in ensuring the development of socially oriented projects, the developer also needs to take an active role in engaging with the community and goal setting. The critical difference between the developer and the public sector in goal setting is the length of the relationship and scope. While developers can be actively involved, their scope is typically limited to their specific site and project; on the other hand, the public sector should be considering the entirety of a city or neighborhood. Public Agencies also play a crucial role in ensuring a fair and open process in establishing goals on behalf of the community and being sure all voices are heard.

When asked about financial goals of projects, and specific measurements of financial success, Foley explains that the firm already has a particular benchmark of financial feasibility, they known all projects need to meet to be viable. However, once that threshold is reached, the focus is not on maximizing the IRR, but rather the other social goals laid out for that specific project. Also, IRR metrics are typically not the financial metrics used by Jonathan Rose Companies, instead of paid minimum developer fees, cash on cash return, and guarantee maximums are more telling. Also, Foley believes that the quantitative standard of measuring financial returns in the real estate sector also needs to be established in the metrics for social returns. As Foley noted, we are seeing the sophistication of environmental returns measurements, with tools that now allow us to track carbon footprint. However, this level of development and rigor needs to be done for social outcomes. Foley also recognizes the difficulty of measuring social sciences, as it is highly variable and determine accurate and directly correlated determinants for healthy is tricky, as well as the length of time it takes to measure said results. While financial returns can be measurer ever quarter, social outcomes such as health implications can take years. Once a metric for social returns are created, the government can then adopt requirements that all developers need to meet in the same way, LEED became a threshold for development in many cities.

Lastly, when balancing financial and social return, Foley always sees the two behaving in tension, with investors having a fiduciary relationship with their clients to maximize financial return. Although social impact firms may have a tolerance on the rate of return, a financial return is always required. Unless you are doing charitable work, there will always be the balance of the two. However, firms like Jonathan Rose Companies are proving that being socially minded makes financial sense and that there are ways to actually to relate your social outcomes to the financial success of a project. As an example, Jonathan Rose invests heavily in clean, sustainable energy systems that offer clean air that benefit resident's health outcomes, while also decreasing the buildings long term operational expenses.

Profile: Equity Community Builders

Founding Principal, John Clawson is a 1985 MIT Center for Real Estate alumni and brings his training as an architect to his development practice. (Clawson, John) As I was connecting with alumni on the West Coast, who do socially oriented work, I came across Equity Community Builders (ECB). ECB is well known in the Bay Area for its approach to real estate and non-profit partnerships.

About Equity Community Builders

ECB was founded in 1994 in San Francisco and represented my only West Coast interview. ECB is known for "*developing real estate that strengthens communities*." (Developing Real Estate That Strengthens Communities) Each word of their name, Equity Community Builders, refers to the mission of the company. Equity or "*Investment, Ownership, Value, Access, Appreciation, Fairness*," Community or "*Inclusive, Relationships, Sustainable, Healthy, Partnerships, Connected*" and Builders or "*Enduring, Quality, Dedicated, Resourceful, Experienced, Strength, Integrity*." (Developing Real Estate That Strengthens Communities)

ECB is known for developing, housing (affordable and at all points on the income spectrum), adaptive re-use of historic buildings, and non-profit innovation. A key aspect of ECB's business model is development management for non-profits and community groups, as well as financial consulting for clients structuring deals with New Market and Historic Tax Credits. Although integral parts to ECB business, my interview with Clawson focused on their real estate development practice as it is the arena where ECB has the most ownership of goal setting and outcomes of their projects. ECB business is split into roughly 70% development management at a fee for non-profits and community groups, and 30% of ECB ownership and development. When managing projects for clients, Clawson mentions that it's the client who sets the motivation or goals for the project. However, ECB only works with groups who share their values. This combination of work leads to a balanced cash flow driven by both ends.

Equity Community Builders Organizational Approach

Unlike the other frameworks in which the developer focused on one specific project, Clawson discussed with me the company's overall objectives for all of their new development projects. In a few cases, Clawson mentions particular projects which will be bolded in the framework below.

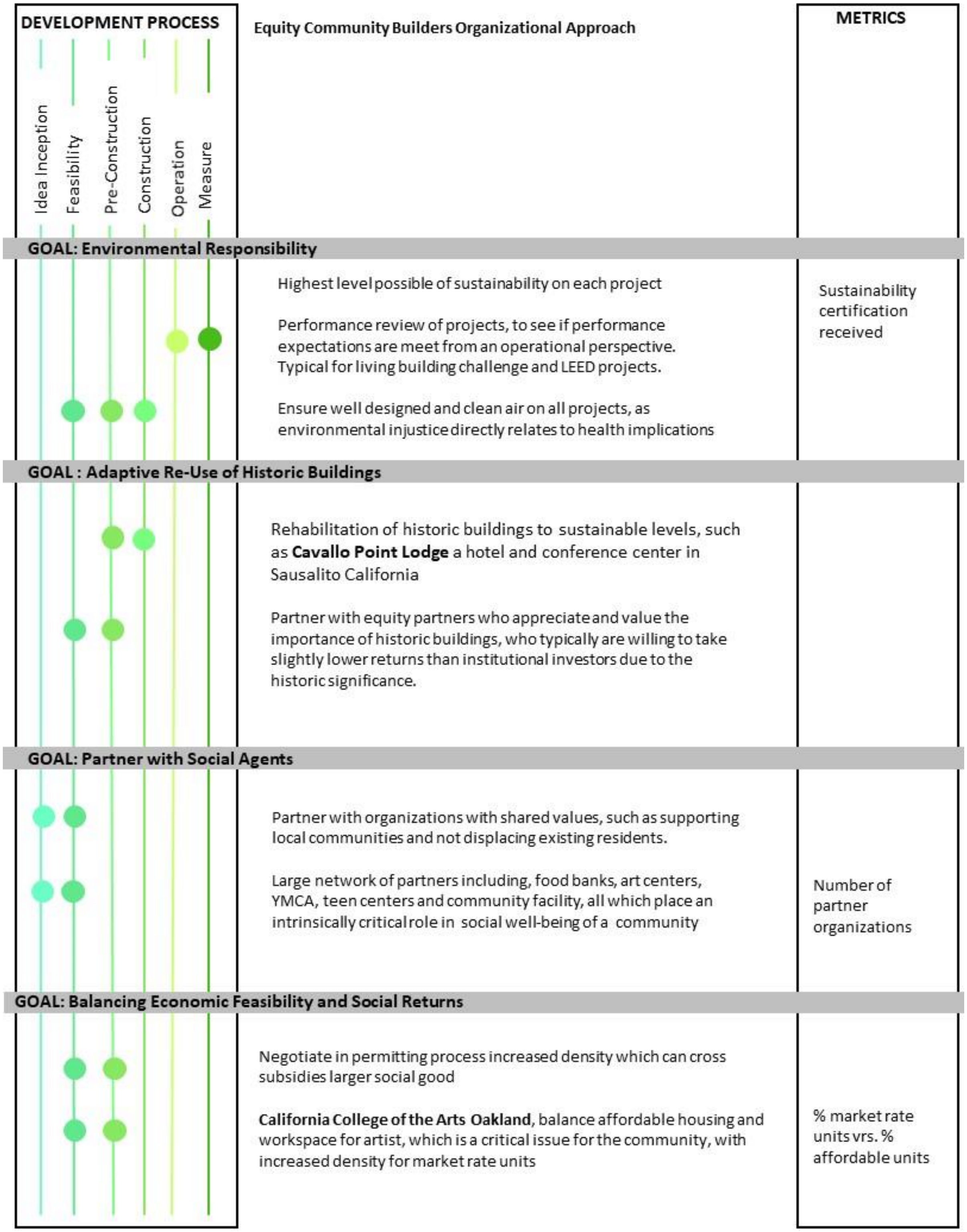

Figure 25: ECB Real Estate Development Process Framework

(Graphic: Nicole Zaccack, 2019 Text: Clawson, John)

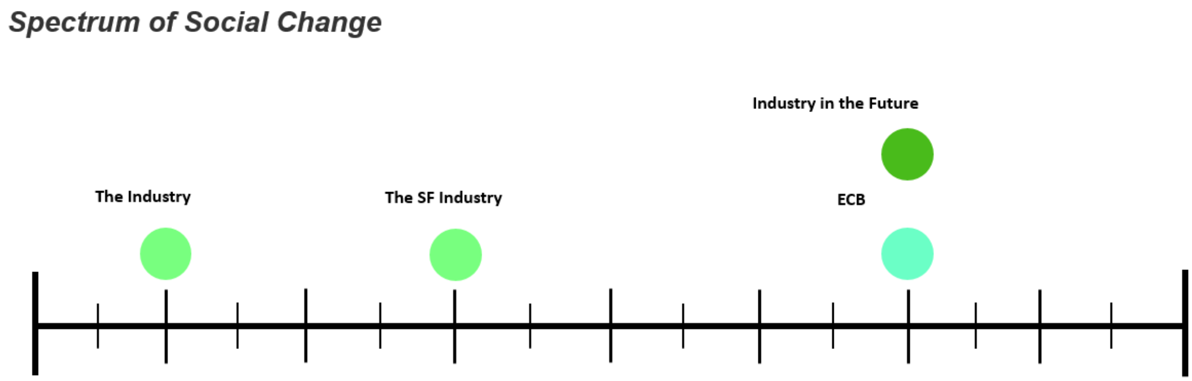

Figure 26: ECB Spectrum of Social Change Framework
(Graphic: Nicole Zaccack, 2019 Text: Clawson, John)

What does Social Impact in real estate mean to you?

"Develop projects that are environmentally and sustainably responsible, which cause the industry to build in infill locations and at a higher density. As displacement becomes a bigger issue increasingly, developers need to balance the development of market-rate units with affordable units. At the same time, we need to ensure community facilities and nonprofits are protected and not displaced as they are also key drivers in communities."

What does the Industry need to do in order to shift to the right of the Spectrum?

"As you can see in the West Coast, and specifically San Francisco local governance regulating and ensuring equitable development can shift the industry. A strong development community will positively respond to politics. However, there is a lot of room for education and greater awareness in the development community on social and environmental issues; in addition, the development community needs to be more creative in ways to implement those social values."

As seen on the spectrum, development in cities such as San Francisco, Berkley, and Oakland is far ahead of the rest of the industry in regards to social change. This is due to the active public agencies, as well as organized community groups and advocates. The cities in which ECB develops have a strong understanding of social and environmental returns and therefore sets the bar quite high for developers. In response, the development community participating in these cities have to meet the expectations of the public, so in many ways, most developers in the area are doing work similar to ECB.

Clawson describes this locational relationship between development and social values by stating, "*We tend to work in some sensitive locations, and there is going to be much more of a focus on social returns*." (Clawson, John) However, cities that are in desperate need of development tend to be more flexible and put less pressure on developers to build environmentally and socially responsible. This furthers the vulnerability of low-income neighborhoods who do not have as much leverage, as say the residents of San Francisco. San Francisco, in particular, has a deep bench of participants that engage in the community process, and there are a host of public relations firms that will help developers through the approval process and through community outreach in the early stages of the project to understand the needs of the community.

With this active community and government participation in the development process, Clawson does warn about potential issues that can arise. For example, ECB is currently working on a high-density residential building, with affordable units in Oakland, surrounded by a community of ultra-wealthy residents who have lived in the neighborhood for decades. These residents have been fighting against all-new high-density developments in their neighborhood, despite the growing housing crisis and being in a transit-oriented high resources area. Another cautionary tale about the over-involvement of the government is regarding the required increased inclusionary housing set by San Francisco, which made the economic feasibility in San Francisco incredible difficult and effectively halted new development in the city. This increased inclusionary requirement as well as increasing construction costs, escalation, and flattening rents shifted the development community from San Francisco to Oakland. Although it is essential for the government to set policies in place to further affordable housing development, Clawson emphasizes the importance of the government engaging with active developers when setting a policy to understand the full implications of said policy. When politicians set their policies and agendas, full participation and collaboration amongst all stakeholders are critical for effective outcomes; just as politicians engage with their constituents, they need to engage with developers, contractors, and investors developing in their communities. The other avenue of regulation that Clawson believes needs more scrutiny is rules and requirements for investors. Whether that means stricter regulations on the amount invested in social enterprises or other solutions, to have a systematic change in the real estate sector, all relating industries need to be regulated.

ECB has a unique perspective in terms of financial returns as they work on behalf of non-profits and themselves. The critical difference between the two is that non-profits typically are not expecting an economic return as they do not have pressure from investors. Typically, non-profit projects are funded through a combination of fundraising, grants, city, and public support, sometimes debt. In contrast, for-profit entities do need to provide a certain return to their investors and for themselves to continue their business. Therefore, Clawson reiterated the necessity for a balance between social and financial return throughout our interview as a key to ECB's success. When asked whether Social Impact funds have provided additional capital to social enterprises to develop, Clawson described how most impact investors are looking for the same financial returns but with baseline thresholds for economic and social responsibility. Instead, ECB finds investor partners who care for the projects and believe in the vision or purpose behind them. Often these investors may be willing to take slightly lower returns because of their care for the project.

In terms of metrics and measuring the realized impact of their work, ECB, like many firms, has not developed a systematic way of doing so. Unless there are specific requirements for a subsidy or certification that require tracking or measuring, most developers do not do so. For example, New Market Tax credit projects do need an element of monitoring, as does LEED, and in these cases, ECB does measure the required metrics. Clawson hesitates to say a universal development scorecard is needed for all projects, as it may create an unnecessary burden on developers and further slow the development process. However, some accountability is necessary, as often there are projects in which the developer agrees to implement crucial social packages that are never realized.

Profile: Haven Developers

I discovered Haven as I was researching socially-oriented firms developing in cities beyond the east coast corridor. I found their mission and work in Durham, North Carolina, particularly exciting, and was curious about how they are operating in a city experiencing significant growth. Unlike the other firms interviewed, Haven is a development, design, and build firm. Executive Director: Finance and Real Estate, Drew Helm, and Executive Director: Construction and New Markets, Bryce Jahner offered me insight into their work. (Helm, Drew, and Jahner, Bryce)

About Haven Developers

Haven is an affordable housing developer targeting "*low to moderate-income families, resettled refugees, homeless, and those impacted by natural disasters."* (North Carolina Real Estate Developers for Develop Haven) Their projects scale from single-family home rehabs to mixed-use, multi-family properties. Haven is structured as a for-profit entity but is a B-Corporation, which was a strategic decision by the founders to allow for growth and innovation. Haven's mission is to "*focus in a community to establish safe, equitable, and affordable housing options. Once established, a broader range of tailor-fit projects are developed as the community has need.* (North Carolina Real Estate Developers for Develop Haven) Haven often partners with non-profit organizations to realize its mission. Also, in house design and construction management allows them to cross-subsidies, other elements of their firm, such as development. It also allows them to manage all aspects of the development process and ensure their vision is realized fully throughout the process.

Hollow Way Place, Single Family Home Renovation, Durham

This interview represents the smallest physical project at 3,000 square feet. This renovated single-family home in Durham, NC, serves as the home for women suffering from homelessness. This project also has the most measurements and metrics in place, compared to the other four projects. Throughout the interview, Jahner and Helm, referred to their work as a proof of concept, which speaks to the long term scalability of their work. Also, they are the only design-build firm interviewed, and therefore their construction perspective is particularly useful.

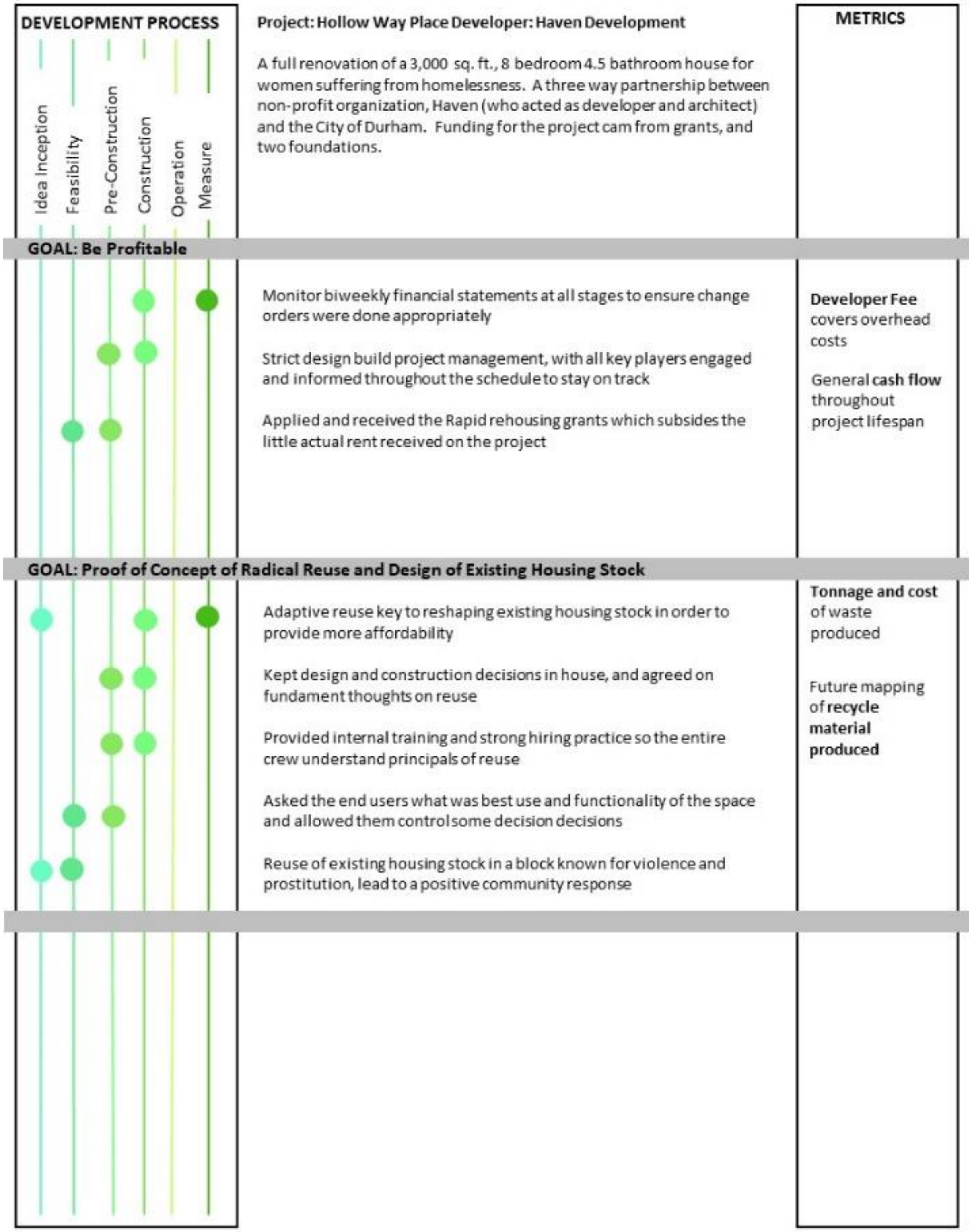

Figure 27: Haven Real Estate Development Process Framework

(Graphic: Nicole Zaccack, 2019 Text: Helm, Drew, and Jahner, Bryce)

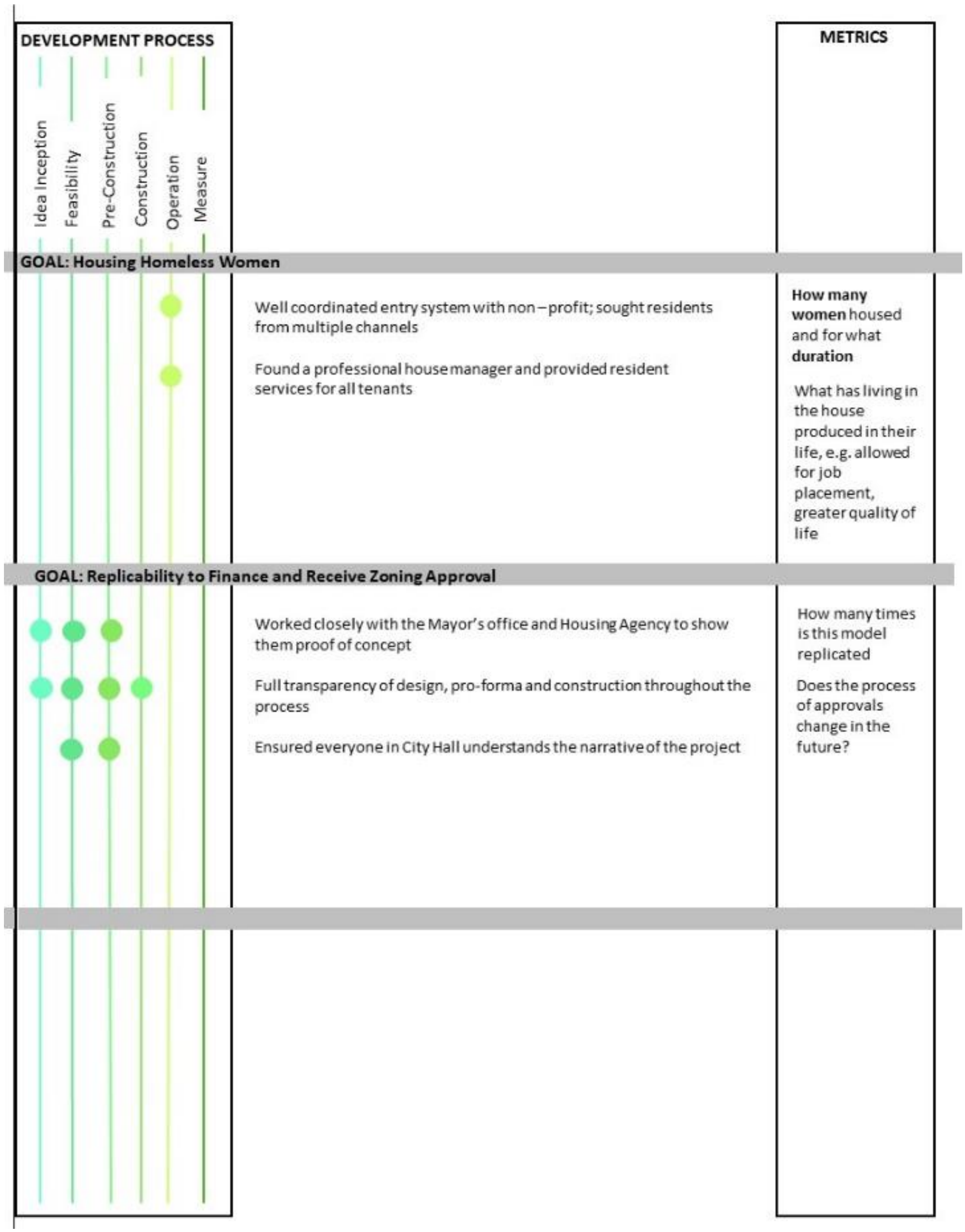

Figure 27: Haven Real Estate Development Process Framework Cont.
(Graphic: Nicole Zaccack, 2019 Text: Helm, Drew, and Jahner, Bryce)

Spectrum of Social Change

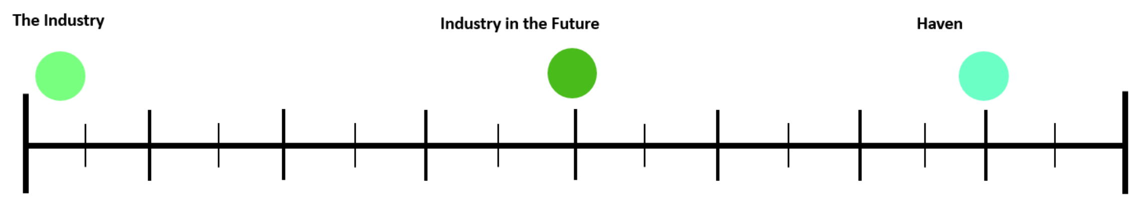

Figure 28: Haven Spectrum of Social Change
(Graphic: Nicole Zaccack, 2019 Text: Helm, Drew, and Jahner, Bryce)

What does Social Impact in real estate mean to you?

Drew Helm – "*On a macro level- the act of thinking more about the community when selecting real estate sites rather than profit; and understanding the impact it will have on the people moving there and the community at large. Social Impact in real estate is recognizing that providing housing is a basic need for humans, and it's a big responsibility, so we should care more about the people living in it. Trying to come up with creative ways to do that, whether it's building the appropriate amenities, opportunities for people to rent and save up to buy, a lot of different avenues – it's more about humans rather than structure and money."*

Bryce Jahner- "*A mission orientation first and it is a prioritization of community, environment, and impact over traditional profit as real estate defines it. It is summarized by housing first, housing then, housing, and. Housing as a first priority for all these downstream effects, housing, then other things can happen as a result of that."*

What does the Industry need to do in order to shift to the right of the Spectrum?

Drew Helm – *"You need to look at what resources you have available and the impact that you can make as a person and what your desire is to do with that. Having organizations like ourselves, really pushing the envelope and proving that it's possible to do work like this puts the fire and creates motivation for the big firms to at least try, as they can no longer say it's not even possible when there's proof that it is has been done."*

My interview with Jahner and Helm also lead to some additional interesting findings reported below. Particularly the importance of understanding the scale of change. For example, Jahner and Helm specifically put Haven one tick to the left of the highest possible level of social change on the spectrum. This is because the amount of scale needed for systematic change is much larger than many organizations start working. For example, the work done by Enterprise Community Partners is much larger and far-reaching, which is a determinant of change. However, it is also essential to consider your community and your personal change. The work of Haven is creating real change in their community and for all the residents living in their project. In addition, Haven does their part in entirely creating impact in as many aspects of their business model as possible such as hiring people exclusively with barriers to employment such as refugees.

Haven actively choose to develop in a growing city such as Durham, North Carolina, as it forced Haven to think creatively on the best methodology for development, which can then be scaled to other cities and even countries. Also, a significant purpose of their projects is to show a proof of concept to the community, government, and development community that projects like theirs are possible and should become the expectation. Durham was a particularly good city as there is a lot of abandoned and underutilized housing stock that can be reactivated for the social function if appropriately developed. The work Haven is doing, illustrates that we can be much less wasteful, and reuse the housing stock we have to handle some of the most severe social issues our cities are facing. Another vital cause to Jahner and Helm was to prove their concept was financially feasible and therefore, could be replicated. They were able to have the project be financially viable by keeping design, development, and construction management in-house, which allowed them to stay on a strict and streamlined schedule, as well as have specific functions of their business subsidize others. For example, if Haven were to take a large developer fee, they would take a much smaller general contractor (GC) fee. This freedom to allocate funding where needed offered Haven more flexibility to spread the wealth equally and further their social mission.

Lastly, Haven is a firm that is actively tracking their impact not just at the end of the project construction but throughout the process. For example, Haven actively measures all their waste created on a project by tonnage as well as by cost. They do this to understand their environmental footprint, but it also to realize their efficiency and cost savings, which are critical economic triggers. By tracking their metrics, it also allows them to learn from past lessons and improve their process in the future. This data also becomes useful when illustrating to the public, investors, and government the success of the project.

Chapter Four: Social Impact Analysis

An analysis of the literature review and developer interviews, addresses our key thesis question: How real estate developers define and implement their social impact goals through the real estate development process? Each section of this chapter will speak to a specific portion of the question.

First, we will analyze existing definitions of social impact, as well as the interviewees' definitions of social impact to see if there is any consistency. By determining the core principles that define social impact, we can reference these principles throughout the rest of the analysis.

Then we will analyze which phases in the development process did most developers implement their impact goals. Does this relationship illustrate the most optimal time to implement project goals for the greatest outcomes? We will also investigate if the data from the development interviews relate to what the literature states about the development process.

All of the impact goals listed by the five developers will be categorized into major impact themes in the social impact goals section. These impact themes will then be compared to the universally accepted SDGs, RICS key development issues, and Shift Capital's goals to see if there are overlaps. These overlaps will represent areas that the existing sector appear to be focusing on and prioritizing.

The metrics the developers listed for each of their projects will be analyzed in the social impact metrics section, and be compared to existing tools of impact measures such as GRESB. The difficulty in measuring impact will be discussed as well as the next steps identified for more rigorous and effective industry impact metrics.

The last section, shifting the industry forward, will look at the sector as a whole. This section is an analysis of where the interviewed developers put the current industry and where they want the industry to be in the future as a way to determine how much work is still needed. Through the literature and interviews, we will create a list of key initiatives that will push the industry forward.

Defining Social Impact

There are a wide range of definitions and even terms for social impact that exist to describe the potential impact of the real estate sector. Some of these terms include, social value, sustainable assets, or sustainable development. The UK 2012 Social Value Act defines it as "*Social value seeks to maximize the additional benefit that can be created by procuring or commissioning services, above and beyond the benefit of merely the services themselves*." (UK Green Building Council, p. 33) While, GRESB defines it as "*a sustainable real asset industry plays a critical role in creating a sustainable world – one where society can meet the needs of the present without compromising the ability of future generations to meet theirs*." (GRESB) This inconsistency in terminology and definition is a major issue for the sector, there is no common understanding as to what we are working towards beyond financial solvency.

Each of the interviews added new insight to complexities of finding a shared definition or to the variety of definitions of social impact currently being employed by real estate developers. While no one individual should determine the right definition for the entire industry, nor should this definition be defined only from a developer's perspective. This definition needs to stem from a variety of perspectives that recognizes the values of all stakeholders including community members, non-profits, public officials, and developers. However, we can use the literature and developer definitions to understand some key concepts that could be incorporated in this definition and are currently being utilized to shape developer approaches to social impact.

Key shared concepts that arose through the interviews that begin to define the social impact that real estate can support, from a developer perspective are:

- **In general, recognizing the impact of real estate and being held accountable for that responsibility**
- **The opportunity to shift decision making power from developer to community**
- **The need to use real estate as a tool to better the lives of community members**
- **The importance of developing accessible and affordable housing, which then leads to many other positive outcomes**

Based on these findings, a definition of social impact in real estate has three major components. First, it acknowledges that real estate is a powerful tool and does effect social value. Second, it recognizes that the distribution of power in decision making should be consider. Thirdly, it states that real estate should be used as a tool to create positive social value, anchored on a specific property type. The specific way, or types of social value cannot be universally defined, however entities like SDG, RICS, and UK GBC have categorized overarching impact themes. These impact themes are further discussed in the subsection social impact goals. However, the one social impact theme that is specifically mentioned by the interviewed developers is affordable housing. The words "*housing*" or "*living*" were used in four out of the five definitions given by the development firms I interviewed. Clearly, housing is a foundation to the creation of social value. A clean, safe, and affordable place to call home is a building block for many other downstream effects. In the United States we are currently short 7.2 million units of 30% AMI or below affordable housing units. (The U.S. Has National Shortage) Clearly affordable housing is not just an issue for affordable housing developers rather this is a sector problem.

However, the key concepts listed above are missing some important aspects that define social impact. At an asset class level, housing is just one avenue for impactful work. All assets play an integral role in defining social impact. For example, economic development is an SDG Goal 8: Decent Work & Economic Growth (UN, Sustainable Development Goals) and a UK GBC impact theme Jobs and Economic Growth (UK Green Building Council, p. 11). Economic development is typically created through the development of commercial and retail uses. When done properly, a permanent job at a new office development, or a small business owners pop up space in a retail center creates tremendous social impact. In addition, rather than stating the avenue of development that should be used to create positive outcomes, maybe the positive outcomes should be listed in the definition. For example, if the positive outcomes that are most important to the definition of social impact are health and wellbeing, a sense of community, and safety these should be listed. Then the development community can determine what is the best avenue for realizing those outcomes, whether that is through housing, commercial, retail, or civic space development.

Development Process

The application of impact goals through the entirety of the real estate lifecycle is essential for optimal impact. This is illustrated in the RICS guide, which highlights the relevant SDGs at each phase of the real estate cycle. However, is there a specific phase in the development process that is the most optimal to implement the steps needed to reach impact goals? Does implementing impact goals in a specific stage lead to a more significant impact? Do certain types of impact goals relate to specific phases in the development process? Through the interviews with developers and literature review, we can begin to sort when most developers are engaging in impact goal setting.

As laid out in the real estate development process section in Chapter One, by breaking down the steps implemented by developers in each stage, idea inception, feasibility, pre-construction, construction, operation, and measure, we can explore where developers are presently focusing their efforts. Each of the steps listed in each firm's real estate development framework was counted, as were the number of steps implemented in each phase of the development process. For example, Seawall has a total of 16 steps, 2 of those 16 steps were implemented in the idea inception phase. Please note many steps were completed in more than one phase. Therefore, the total sum is greater than 100%. See Below:

Idea Inception:

Seawall: 2 out of 16   HYM: 3 out of 20   Jonathan Rose: 5 out of 16

ECB: 2 out of 9   Haven: 4 out of 13

Total: 16 out of 74 steps or 21% of steps were implemented in the idea inception phase

Feasibility:

Seawall: 7 out of 16   HYM: 11 out of 20   Jonathan Rose: 10 out of 16

ECB: 6 out of 9   Haven: 6 out of 13

Total: 40 out of 74 steps or 54% were implemented in the feasibility phase

Pre-construction:

Seawall: 12 out of 16   HYM: 12 out of 20   Jonathan Rose: 11 out of 16

ECB: 6 out of 9   Haven: 8 out of 13

Total: 49 out of 74 or 66% were implemented in the pre-construction phase

Construction:

Seawall: 2 out of 16   HYM: 3 out of 20   Jonathan Rose: 2 out of 16

ECB: 2 out of 9   Haven: 6 out of 13

Total: 15 out of 74 or 20% were implemented in the construction phase

Operation:

Seawall: 3 out of 16 HYM: 4 out of 20 Jonathan Rose: 4 out of 16

ECB:1 out of 9 Haven: 2 out of 13

Total: 14 out of 74 or 18% were implemented in the construction phase

Measure:

Seawall: 0 out of 16 HYM: 0 out of 20 Jonathan Rose: 2 out of 16 ECB:1 out of 9

Haven: 2 out of 13

Total: 5 out of 74 or 6% were implemented in the measure phase

A majority of the steps were implemented in the feasibility (54%) and pre-construction stages (66%). This is likely because many of the big decisions, particularly relating to public benefit agreements, design, and community outreach, mostly occur during those two phases. As described in Chapter One, the feasibility stage is typically when a developer determines if the financial, permitting, design, and project aspirations can all align to realize the project. As stated by both Manekin of Seawall and Foley of Jonathan Rose, financial feasibility is a benchmark that needs to be ticked for the project to continue to the next stage. Therefore, this phase is critical as it is when developers realize if their social impact aspirations and their financial requirements are balanced. The project can continue to the next phase. It is in this phase that the larger, overarching goals such as the number of affordable units or amount of retail come into play as these decisions will impact the financial feasibility of the project. For example, if the primary goal of a project is to maximize the number of affordable units at 60% AMI or below, but the land value of the potential site is exceedingly high due to competition. The impact goal and financially viability do not balance out. The developer will have to either select a less expensive site, keep the site and develop fewer units, or choose to take a lower return to have both. Although my literature review and interviews did not do an in-depth study of public benefit agreements that reflect the community and government needs, these agreements also determine the financial feasibility of a project. When developers negotiate these agreements with the City and community, they already have a sense of how many benefits they can financially afford, e.g., how much public space they can develop or how much funding they can put towards traffic improvements. For this reason, any goal or program that will dramatically change the financial model should be discussed in this phase as it needs to be countered by constraints such as human and financial capital.

The pre-construction phase, which was the phase in which most of the development steps were implemented by developers interviewed, encompasses some of the most significant decisions in the development cycle. As described in Chapter One, this is the phase in which partnerships and commitments are solidified, including capital partners, design team, non-profit partners, large tenants, public approvals, public benefit agreements, RFP and subsidy allocation, etc. These partnerships define the values of the project; therefore, significant social impact steps need to be implemented here. For example, Clawson of ECB spoke about their non-profit partners and how it is essential for ECB and the partner non-profit to have aligned values. Traditionally, this is also the phase in which developers engage with the "public." As developers meet with local stakeholders and begin to understand the needs of the community, they also make commitments to them to realize their goals. Manekin met with over 250 members of the Remington community and asked them what they wanted for the redevelopment of Remington Ave. He particularly asked them what services or retail stores they wanted in their community. This shortlist of most requested stores was the guiding principle for retail tenant selection. Not only did Manekin want to provide these services to the community, but my verbally committing he had accountability to the residents. However, there is always a limitation to community engagement; not every store each resident wanted was able to be incorporated into Remington Row. In fact, despite all efforts, there were still two residents of Remington, who did not approve the redevelopment of Remington Ave.

The largest number of steps are implemented in the first three phases, is this because the greatest level of impact is created in these phases? Well, in part, this is due to the nature of the development cycle in which the greatest number of decisions are determined in these early stages. Therefore, developers must begin their impact goal setting at idea inception. However, after the pre-construction phase, there is a significant decrease in the number of steps being implemented by developers interviewed. Particularly in the operations (18%) and measure phases (6%). This is an issue; as social value can be created in every phase. As stated in the RICS guide, every stage of the real estate life cycle development, real estate uses, and recovery phase, are interconnected and create social value. (Royal Institution of Chartered Surveyors, p.14) Due to the fragmented nature of the industry, those managing a particular phase may not be communicating the values to those managing another phase. For example, if the development firm which sets specific aspirations for a project and then hands over the operation to another firm who is not aware of those aspirations, the efficacy of the project just dramatically decreased despite the best efforts of the developer. The same issue occurs when investors solely focused on the operation of the projects and its cash flow, and therefore make uninformed decisions during the pre-construction phase. The importance of each phase of the development cycle is highlighted by GRESB weighing the management and policy phase as 63.3% of the overall score, and implementation and measurement as the remaining 36.7% of the score. Although the weight of the scores is skewed and should be more heavily weighted towards implementation and measurement based on the developer interviews, this shows the value of every phase in creating impact in real estate.

In the end, the key to optimizing impact goals to the proper phase is based on the type of goal at its alignment to the type of decisions occurring during that phase. Due to the focus of pre-assessments, public approvals, and community outreach, a majority of the **commitments to social impact goals** are set in the first three phases, idea inception, feasibility, and pre-construction. These are the phases where the number of affordable units, the amount of public space, or type of retail are determined. Therefore, these goals align with the decisions occurring during these phases. However, the **realization of social impact goals** occurs during the last three phases, construction, operation, and measure. These are the phases where the construction of quality air systems, programming of inclusive events, and measurement of health impacts occur, and therefore goals align with the decisions occurring during these phases. As seen in the GRESB assessment, developers are often judged on their commitments, but very rarely for their realized impacts. Rather than stating a specific phase is optimal for the creation of value, the real conclusion is that value is created when the goals are followed through in all six phases. This is the optimal way to realize social impact goals.

Each firm implemented its steps into each development phase slightly differently and teaches us how a specific project context can change how developers operationalize their desired impact. In the case of Seawall, the firm came into the development process when the community was already engaged in the master planning and idea inception of Remington Ave. Therefore, Seawall viewed their role as realizing the goals of the community through the feasibility and pre-construction phases. HYM's Suffolk Downs is currently in a very extensive public permitting process in both

Revere and Boston. Due to this, a majority of the public benefit or social impact goals are in the form of commitments highlighted in the pre-construction phase.

In the case of Jonathan Rose, Sendero Verde was won through a competitive RFP. The City had already created a thorough application process that outlined all the requirements and goals of the project. Therefore, a majority of the idea inception and feasibility phase was already completed by the City, while Jonathan Rose was tasked with realizing said goals and ensuring they aligned with their company's interest. Due to this, a bulk of the work that needed to be done related to realistically realizing the aspirations of the City. Most of the steps were implemented in the pre-construction and construction phase. For example, the RFP stated the project needed a vibrant public space. Still, it was up to Jonathan Rose to hire the right landscape architect and actualize the vision through design by "designing a big stairwell and accessible elevator that connect to Park St."

As a majority of ECB's work relates to partnerships with non-profits and sourcing the right capital and approval for the projects, most of their steps come into play in the pre-construction phase. Haven's project is all about proof of concept in both the idea but also the construction of the building. Proving to the City, community, and rest of the industry that this idea could be replicated meant they strategically focused their goals in the feasibility stage to ensure the project would not fail. At the same time, their heave focus on radical reuse of existing housing stock meant that a lot of the steps were implemented in the construction process.

Social Impact Goals

Every development project will have its own distinct goals depending on the specific needs of the community it is serving; the interviews highlighted significant categories of the impact that developers interviewed are currently working to implement. This approach is similar to the three impact themes determined in the UK GBC guideline. By creating impact themes, this allows us to think about where the sector universally needs to focus our attention when developing. Below are the critical social impact goals identified through the interviews. After each impact theme, I have listed how these goals relate to the 17 U.N. Sustainable Development Goals, RICS key development issues, UK GBC impact themes, and Shift Capitals impact themes, which further highlights the applicability of these impact themes.

Housing Vulnerable Populations:

Whether this is homeless women (Hollow Way Place, Haven), or artist live-work housing (California College of the Arts Oakland, ECB). The creation of safe, clean, amenity-rich, affordable housing is essential to create social value in the real estate sector. To properly develop affordable housing, developers need to make sure the right channels are in place to find residents in need. Active property management is also needed to ensure that the right services are made available to residents. Developers should consider developing a range of income brackets (from formerly homeless up to 120% AMI) to create a diverse residential community, and ensure the income brackets developed relate to the actual need in the specific area.

Related SDG Goals:

Goal 1: No Poverty, Goal 3: Good Health and Wellbeing, Goal 5: Gender Equality, Goal 10: Reduced Inequality, and Goal 11: Sustainable Cities and Communities (U.N., Sustainable Development Goals)

Related RICS Key Development Issues:

Strategic Site-Use Reevaluation, Healthy, Safety and Well-Being of Building Occupants**,** Treatment of Tenants and Communities, and Land Governance (Royal Institution of Chartered Surveyors, p.17, 20, 23)

Related UK GBC Impact Theme:

Health, Wellbeing and the Environment (U.K. Green Building Council, p. 11)

Related Shift Capital Impact Theme:

Housing (Shift Impact Report 2018, p.16)

Environmental Sustainability:

Every developer reiterated the importance of environmental sustainability for the apparent need to combat climate change; however environmental sustainability also combats environmental injustice and benefits the health outcomes of residents. The key to this goal is for developers to always develop to the highest level of sustainability as possible, and conduct performance reviews to ensure the systems are operating correctly. Developers should go beyond LEED certifications and try to be innovative in their approach to environmental sustainability, such as developing the largest passive house in the united states (Sendero Verde, Jonathan Rose Companies) or reusing existing housing stock to diminish waste created (Hollow Way Place, Haven). Also, developers need to create resiliency plans that take into consideration all potential climatic changes and build projects that are meant to last.

Related SDG Goals:

Goal 7: Affordable and Clean Energy, Goal 11: Sustainable Cities and Communities, Goal 12: Responsible Consumption and Production, Goal 13: Climate Action, and Goal 15: Life On Land (U.N., Sustainable Development Goals)

Related RICS Key Development Issues:

Environmental stewardship, Quality of planning, design, and construction, Waste management, resource conservation, and recycling during demolition, and Refurbishment and retrofitting (Royal Institution of Chartered Surveyors, p. 17, 20, 23)

Related UK GBC Impact Theme:

Health, Wellbeing and the Environment (U.K. Green Building Council, p. 11)

Activated Public Space:

Activated, programed, inclusive, green public space leads to an increased sense of community, and more active residents. It also leaves space for the community to gather, whether, for civic reasons or the arts, it generates space that individuals feel they are welcomed to create in. Public space can range from 40 acres of open space (Suffolk Downs, HYM) to a residential courtyard that connects to the public realm (Sendero Verde, Jonathan Rose). The key to a successful public space is to work with a strong, local design team and create an inclusively designed public space that connects residents and the surrounding neighborhood. Program the open space to create activated areas for play, while leaving areas passive for individual reflection.

Related SDG Goals:

Goal 3: Good Health and Well-being, Goal 11: Sustainable Cities and Communities, and Goal 17: Partnerships to achieve the Goal (U.N., Sustainable Development Goals)

Related RICS Key Development Issues:

Healthy, Safety and Well-Being of Building Occupants, Treatment of Tenants and Communities, Land Governance, and Strategic site-use reevaluation (Royal Institution of Chartered Surveyors, p. 17, 20, 23)

Related UK GBC Impact Theme:

Strength of Community (U.K. Green Building Council, p. 11)

Related Shift Capital Impact Theme:

Community (Shift Impact Report 2018, p.16)

Walkable Neighborhoods:

A key to a healthy community is the walkability of residents to all the necessary amenities, including education, transit, recreation, healthcare, food, retail, community resource, and even work. Developing mixed-use projects that include retail, residential, commercial, and community uses so residents can access all needs within the neighborhood not only leads to a sustainable city it also increases safety by activating the site 24/7. The development of 12,300 linear feet of walking and bike paths (Suffolk Downs, HYM) and 30 ft. sidewalks (Remington Row, Seawall) are strategic design techniques that prioritize the pedestrian walkability. Developers should strategically mix uses, particularly on the street level, and design walkable streets that are well connected to transit to create healthy neighborhoods.

Related SDG Goals:

Goal 9: Industry, Innovation, and Infrastructure, Goal 11: Sustainable Cities and Communities, and Goal 12: Responsible Consumption and Production (U.N., Sustainable Development Goals)

Related RICS Key Development Issues:

Healthy, Safety and Well-Being of Building Occupants, Treatment of Tenants and Communities, and Land Governance (Royal Institution of Chartered Surveyors, p.17, 20)

Related UK GBC Impact Theme:

Strength of Community (U.K. Green Building Council, p. 11)

Related Shift Capital Impact Theme:

Community and Inclusion and Diversity (Shift Impact Report 2018, p.16)

Economic Development:

Economic development that is generated and kept by the local community leads to extraordinary downstream benefits. This is an extremely cautionary goal, as many developers claim they are providing economic development, but they are extracting said financial benefits. Creating wealth and maintain it within the hands of the community, leads to further investment into the community by neighbors shopping at the local grocery co-op or tipping their local barber. Ways to ensure economic development is created within the community is by leasing retail space to local entrepreneurs whose services meet the needs of the residents (Remington Row, Seawall) or the creation of temporary construction jobs and permanent jobs, and ensuring a portion of jobs are allocated to the local and minority communities (Suffolk Down, HYM). As a note to developers, the creation of construction jobs is an intrinsic aspect of development and, therefore, not an added social value; allocating said jobs to the local community and creation of permeant jobs for the local community does add value.

Related SDG Goals:

Goal 8: Decent Work and Economic Growth, and Goal 9: Industry, Innovation and Infrastructure (U.N., Sustainable Development Goals)

Related RICS Key Development Issues:

Respecting Workers' Rights, and Decent work and human rights within the value chain (Royal Institution of Chartered Surveyors, p.17, 20)

Related UK GBC Impact Theme:

Jobs and Economic Growth (U.K. Green Building Council, p. 11)

Related Shift Capital Impact Theme:

Economic Development

As noted, this is not an exhaustive list of impact goals the development industry needs to tackle, there are many more, and each project will need to focus on the issues most related to the community. However, the overlap of goals between these five resources shows that there are clear goals that are being prioritized. The above impact themes are the categories many entities agree are essential, and therefore they are most likely to be realized. There are some holes in these themes, the most obvious being none of these resources come from the perspective of the community. Without the community agreeing on the importance of impact goals, the sector cannot truly get a sense of the urgency of each goal. Some significant themes that tangentially relate to the above impact themes put should be explicitly listed are the prevention of displacement, the physical and mental health of tenants and occupants, and the protection of culture, history, and the arts.

Another fundamental way to further the potential impact of a project is to set intentional goals. Whether that is by using the UK GBC framework or the real estate development process framework I created illustrated in Chapter Three, it is imperative for developers to lay out their goals. By consistently using a framework and transparently sharing said framework with public agencies and the community, developers will be held accountable to realize their goals.

Social Impact Metrics

The importance of quantifiable metrics that can tell us the impact of real estate's social return is very important. With ESG funds on the rise (GIN), and companies like GRESB giving firms a score that relates to their environmental, social, and governance, metrics are becoming a more prevalent topic of conversation in the sector. However, and described in Chapter Two, GRESB results do not provide a realistic and accurate representation of true impact.

Even in the five firms interviewed, very few had actual metrics that illustrated the real impacts. Most of the firms were able to measure their first impacts, for example, the number of affordable units created, such as Sendero Verdes 709 units or the roughly 1 million visitors per year that visit Remington Row. However, what is much more challenging to measure is the secondary and tertiary impacts of real estate. For example, increased activity level and the related health implications of residents living in Suffolk Downs, or how many times Haven and others replicate Haven's renovation model.

Another complexity of measuring the social impacts of real estate is the dimension of time. Social impacts are realized in both the short-term and long-term. As an example, a short-term impact could be the measure of asthma attacks or emergency room visits that occurred in a year after a significant renovation of a multi-housing project to all clean environmental materials. A long-term impact would be whether the resident's life expectancy increased over time. Both impacts are essential, although long term impacts are often more challenging to measure due to the length of time required to monitor. However, these long term impacts are indicators of systematic social change. For example, the work of Seawall in the neighborhood of Remington was very impactful in creating economic development and affordable housing. However, some of the unintended long term impacts of Remington Row included the displacement of existing renters in the surrounding blocks.

Although difficult to measure said impacts, it was clear in my interviews that each of the developers was actively aware of the potential impacts of their work. For example, Baker of Jonathan Rose Companies brought up the potential positive health impacts due to the clean air created by the passive house system, and how the quietness of the system could have a positive impact on mental health. Or, Manekin of Seawall qualitatively knew the activation of Remington Ave., created a greater sense of safety in the neighborhood and less crime. Qualitative or probable positive impacts are still significant, and not everything needs to be measured, particularly when it relates to social themes. However, if there was a better way to measure these secondary and tertiary social impacts, the 502 billion dollars' worth of impact funds (GIN), could be better allocated towards developers that are creating social value.

However, some firms such as Jonathan Rose have research teams in place that are beginning to investigate these secondary and tertiary impacts. While Enterprise Community Partners launched a national initiative, Health Begins with Home, which uses data to drive decisions between health and residents. (Health and Housing) As noted in the 2019 GRESB sector results, health impacts are a particularly important category relating to real estate as there are clear ties between the two.

A significant identified barrier to the creation of social value in the real estate sector is the inconsistency and lack of knowledge on how to measure impact, as highlighted in the UK GBC guidelines. However, being able to measure social value to financial terms could "*support the influence of social value in development appraisals and scheme viability*" (U.K. Green Building Council, p. 26) Therefore, projects that have created a lot of social value are actually financially valued more. As many in the sector often argue, social value is complex. It has long-term horizons making it impossible to measure, which can create a dangerous undervaluation of the real importance of research in this field.

This thesis is not covering how and what tools are best to be used to measure impact. However, it does make a call to the sector to allocate resources to create a centralized and consistent way of demonstrating and realizing these impacts. Whether that is a framework, rating agency, measurement tool, or scorecard, the key is that there is a consistent way for developers to determine the impact they are creating. Although many different entities are working on this subject, such as GRESB, Enterprise Community Partners, Berkeley Group, it will be critical for the sector to pull all these resources together to create one consistent system. If a system was created to allow us to confirm the social impact of real estate projects, developers could receive a certification like the environmental realm does through LEED. These social impact certifications can become requirements for city approvals, resulting in a dramatic response by the sector. This fact was highlighted in my ECB interview when Clawson reiterated that only new market tax credit deals report their social impact results as these results tie to the number of tax credits allocated.

Shifting the Industry Forward

The 2019 GRESB results show a global average score of 72 out of 79 points in 2019; this is a 4-point increase from the 2018 report (GRESB, 2019 GRESB Real Estate Results). GRESB's assessment of ESG scoring places developers on a spectrum, as described in Chapter Three. From the perspective of GRESB, the average developer is still 7 points away from reaching a maximum or perfect GRESB score.

From a different lens, the developers interviewed placed the industry as it currently stands and where they would like to see the industry in the future on the spectrum of social change framework. The figure below illustrates the collective spectrum of social change, showing where all five developers place the industry, their organization, and the industry in the future.

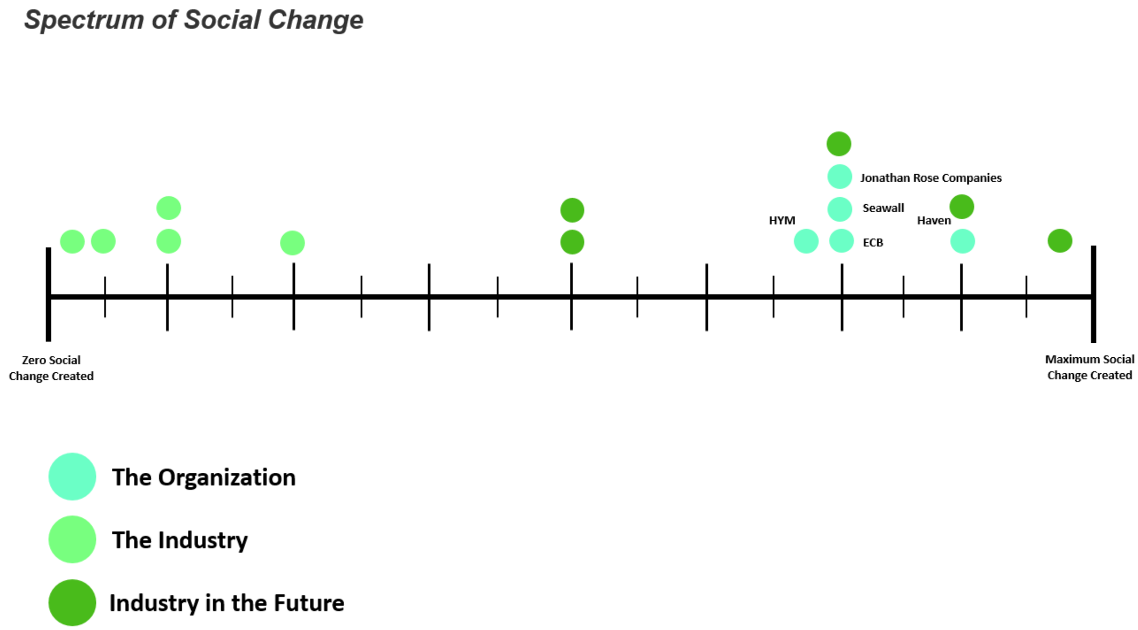

Figure 29: Collective Spectrum of Social Change Framework
(Nicole Zaccack, 2019)

We can see from this collective spectrum that all five developers placed the industry as it currently stands in the two leftmost ticks on the social change spectrum. Also, all five developers placed the industry in the future further to the right. This spectrum does not relate to specific scores or numeric ratings but illustrates that these developers want to see a change in the industry. Regardless of who is rating the industry, whether that is GRESB or a socially-oriented developer that was interviewed, there is a desire to see growth in the sector. While GRESB shifts the sector forward by highlighting specific issues in their assessments and rewarding companies that perform well in those issues with a high score, socially-oriented developers play another vital role in advancing the sector.

In some cases, the developers interviewed believed the industry in the future should surpass their organization on the spectrum. While others believed there should also be organizations, like themselves, that are ahead of the rest of the industry and pushing the sector forward. Regardless of the organization's exact placement on the spectrum, it suggests there is a gap between where the socially-oriented developers interviewed view themselves as operating and the rest of the industry. This showcases an opportunity for the industry to learn from developers that are already working towards more profound social value. These developers could collaborate and teach the rest of the sector how to develop with social impact in mind, which may lead to the entirety of the industry to shift to the right. How else can we advance the sector's commitment to social impact? Below is a list of key considerations gathered from the developer interviews.

- **Placing individuals who care about social impact in leadership positions**
- **Diversity of perspective within development companies**
- **Academic Institutions reporting on the subject of social impact in real estate**
- **A universal social metric that allows public agencies to compare developers on their social outcomes**
- **Stricter but informed regulations by public agencies**

This list provides a strong foundation for shifting the industry forward as it addresses that change comes from within an organization, as seen in the first two points, and also from external checks and balances as addressed in the last three points.

Conclusion

The topic of social impact in real estate is in its early stages of development, and there is still a substantial amount of research that is needed. This thesis is a part of a collection of literature that recognizes the potential the real estate industry has to produce real, systematic social change. Developers play a particular role in this change, as they hold the ability to set and implement social impact goals through the real estate development process. The development process is a powerful instrument that can be wielded to turn land and material into a product that produces returns. These returns are the real focus of this thesis. As traditionally, development has demonstrated, one return created is financial. Another return created is social.

Some ways to ensure these social returns create positive social value are intentional goal setting that meets the target community's needs, aligning impact goals through all six phases of the development process, and ensuring long-term actualization of those impact goals. However, this thesis does not conclude with a guaranteed formula on how to create positive social value. Instead, it presents the current literature that exists on the subject area, lessons learned from socially oriented developers, and frameworks that can be used to structure thoughtful development. This material and the corresponding analysis presents the challenges and opportunities of developing socially impactful real estate. This thesis concludes with a few key considerations that developers and the industry can reference when considering the social impact of real estate.

Key Considerations for Developers

How can developers optimize their social impacts in the built realm? What are the tools and steps developers need to take to create positive value? This thesis is rich with literature and illustrative profiles that can be pulled by developers to guide them through their next project. Although balancing social, financial, and environmental returns is complex, this holistic approach to real estate development can lead to the highest amount of shared value created for all stakeholders. I leave the following key considerations for developers to keep in mind when developing.

- **Local context is the key to decision making.**
    - The creation of social impact is defined by meeting the greatest needs of the community. All decisions need to be tailored to the needs of the local area and provide solutions to the struggles suffered by the community at hand.
    - Recognize the complexity of the targeted community you are serving and get a diversity of opinions from within the community. Be particularly conscious of individuals or groups within the community who are likely to be marginalized.
    - When visioning and decision making are done with the community, it leads to a more significant and more targeted impact. Use the power of development to realize the aspirations that provide the highest equitable good within the community and balance said aspirations with the financial and legal constraints of development.
    - The power and representation of all stakeholders should be considered. Developers need to feel the same responsibility to provide social returns that meet the needs of the community as they feel towards providing financial returns to their investors.
- **Be intentional and outcome-focused.**
    - Set impact goals at the idea inception phase, and realize said goals throughout the development life cycle.

    - Be intentional and transparent with impact goals, and use a framework that is shared with the public to hold oneself accountable to realize the goals. Make sure everyone on the team and all stakeholders are aware of the values of the project.
    - Develop a system to measure the outcomes of the impact goals created and ensure goals are realized and benefiting the community.
- **Align oneself with capital and partners with shared values.**
    - When searching for capital and partners, be transparent with the project goals, and make sure all parties are aligned.
    - Patient capital invested in the mission is a critical input that can be a significant determining factor in the success of a project.
    - Ensure all tenants, management, residential services, non-profit entities, and other partners are furthering and adding to the likelihood of achieving the social impact of the project.
- **Diversity and inclusion lead to the greatest impact.**
    - Development teams are most successful when they look like the communities they are serving. Ensure development teams have a mix of racial, gender, and learned diversity.
    - Hire local, and minority small business entrepreneurs, residential managers, construction workers, etc. as these are the individuals who know how to best provide for their neighbors.
    - Design and develop spaces that are inclusive of everyone, particularly disenfranchised and forgotten populations. Develop spaces that do not just serve the residents, but benefits the wider community.

Key Considerations for the Real Estate Industry

This thesis is written with a developer lens; however, every stakeholder in the real estate sector plays a significant role in creating social impact in the built realm. For the entire sector to shift of the spectrum of social change, we will need everyone who touches the real estate cycle to be involved. This will also require developers to collaborate and share resources with the public sector to achieve the necessary steps required to further the social real estate asset. How can the entire industry produce a more significant social impact? I leave the following key considerations for the industry to keep in mind when considering social impact in the real estate.

- **Create consistency and accessible means to measure social impact.**
    - Develop a consistent system that demonstrates the success of projects social impact efforts.
    - Appraise and valuate projects based on their social, environmental and financial value.
    - Investors, developers, and public agencies can compare social, environmental, and financial returns to understand a holistic return and, thus, be able to determine better which values are a priority for a given project.
- **Develop a shared understanding of social impact.**
    - Receive feedback from as many stakeholders as possible and workshop a shared definition of social impact in real estate.
    - Share and educate all relevant parties on what social impact in real estate means, and best practices for producing positive impact.
    - Report the results annually, lessons learned, and new findings of social impact in real estate.
- **Pass laws that require social impact thresholds for developers.**
    - Pass a social value law that legally entails companies to create social value when feasible and award government contracts based on financial, environmental, and social returns.
    - Public agencies can consider setting requirements on the social impact that developers need to meet to receive density bonuses and zoning variances.
    - Develop policy and subsidies that encourage the development of affordable housing, and consider legally protecting the right to housing.
- **Local stakeholders need to get involved and be listened too.**
    - Local stakeholders need to get involved and share their opinions in developer community meetings. Show up and actively participate in workshops and design sessions that affect your neighborhood.
    - Developers and public agencies need to listen to the opinions of local stakeholders, and schedule community meetings and workshops to be as accessible as possible to the community.

Future Research and the Role of Academia

This subject of social impact in real estate is still in its early days of research and academic studies. There are many avenues for future research; however, I will highlight the studies that I believe are most related to the topic of this thesis. As mentioned throughout this thesis, research on developing a tool that can quantify the social impact of real estate and set it to financial terms would be a tremendous step in verifying the real impact the industry has on social issues. It would also dramatically expedite the process of public agencies setting social impact requirements on developers.

Additional interviews with other socially-oriented developers and non-profit developers will give a more extensive base to analyze shared impact themes, identify the strengths and gaps within existing developer operations, and best way to optimize the development process for social impact. In addition, research on how international developers are creating social impact through real estate is a critical study for the global industry. This global perspective is particularly important when understanding how the role of active or inactive government changes the impact developers are held accountable for.

Research that focuses on the perspective of community members who are affected by real estate is needed. Often the academic and professional world focuses solely on the opinions and voices of those with power, who dictate to us the effects their work has on the community. In doing this, we lose the voice of the real users of real estate, the community members. Therefore, a study that surveys the opinions of community members living in neighborhoods with active real estate development will teach us about the real impact of our actions. Another potential study would be to focus on one project and use the frameworks created in this thesis to interview all the key stakeholders, such as a community member, an investor, a contractor, a designer, and a director of the respective planning agency. This study would show where impact goals overlap and where they diverge; it would also illustrate how different stakeholders can have immensely different perspectives on the same project.

Academia serves a unique role in reporting and challenging the industry from a non-biased third-party perspective. More institutions need to create research centers that focus on studying the implication of development on social outcomes. These studies should be done in collaboration with real estate programs, public health schools, medical schools, policy schools, urban planning schools, and many other related study areas. By developing research centers focusing on the subject, academic institutions begin to centralize the knowledge within the professional and academic sectors.

Also, academic institutions should be teaching curriculum to the new crop of developers on the importance of social impact in real estate. By teaching the next generation how to develop with social impact in mind, academic institutions play a significant role in shaping the mindset of the industry. Every course on valuation and modeling should have a parallel track on social valuation and modeling. Conferences sponsored by institutions, such as the Transformative Real Estate Symposium sponsored by the MIT Center for Real Estate, are ways in which the academic and professional world can collaborate and learn together. Academic institutions play a significant role in setting the tone for the future of development and the future of social impact of real estate.

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