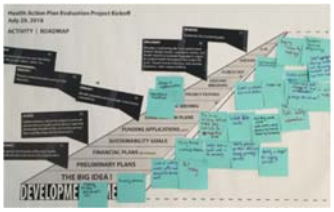
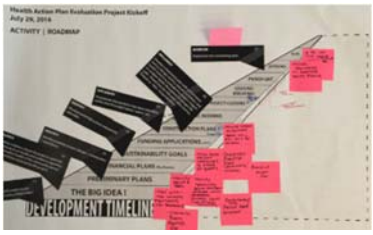
HEALTH ACTION PLAN PILOT PROGRAM PROCESS EVALUATION

February 2017



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HEALTH IMPACT PROJECT

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Executive Summary

Background

Enterprise Community Partners (Enterprise) launched its Green Communities initiative in 2004. The central element of the initiative is the Enterprise Green Communities Criteria (the Criteria), which is the leading green building standard for affordable housing in the United States. The Criteria have spurred the widespread use of healthy design and building practices across the affordable housing field. The 2015 update to the Criteria includes best practices in active design, health-related criteria inspired by the Health Impact Assessment process and new standards for indoor air quality. More specifically, the 2015 update includes two criteria within the Integrative Design category based on the Health Impact Assessment model: one mandatory criterion (Criterion 1.2a, *Resident Health and Well-Being: Design for Health*) and one optional criterion (Criterion 1.2b, *Resident Health and Well-Being: Health Action Plans*) to address resident health and well-being. The inclusion of these criteria arose from a partnership between Enterprise Green Communities, the Health Impact Project—a collaboration of the Robert Wood Johnson Foundation and The Pew Charitable Trusts—and the U.S. Green Building Council aimed at promoting and streamlining the comprehensive and systematic consideration of health in housing through green building certification programs.

While many affordable housing developers include health-promoting design features in their buildings, these design decisions are often made without regard to the specific health needs of a building's residents. Criterion 1.2b calls for a housing developer to collaborate with public health professionals and community stakeholders to assess, identify, implement, and monitor achievable actions to enhance health-promoting features of their project and to minimize features that could present risks to health.

Enterprise and the Health Impact Project were interested in observing and evaluating the process by which community development corporations (CDCs) implemented Optional Criterion 1.2b. Funded by the Health Impact Project, Enterprise conducted a pilot program, and subsequent process evaluation, with five affordable housing developers between July and December of 2016. The purpose of the pilot program was to observe and support the process by which affordable housing developers use public health data and forge the key partnerships necessary to create a Health Action Plan and a Monitoring and Implementation Plan, the two components of Optional Criterion 1.2b. Moreover, this project would evaluate the effectiveness of Criterion 1.2b in capacity building. The knowledge gained through this pilot, and reflected in this evaluation report, will inform future efforts by Enterprise to develop tools and resources that will assist developers in implementing the health components of the 2015 Criteria and improving resident health outcomes through building design decisions.

The Pilot Program Cohort

Based on a competitive process, Enterprise selected the following five community development corporations (CDC) to participate in the five-month pilot program:

- Grant Housing & Economic Development Corporation, Los Angeles, California
- Gulf Coast Housing Partnership, Inc., Hammond, Louisiana
- Latin United Community Housing Association, Chicago, Illinois
- Mercy Housing Southeast, Atlanta, Georgia
- SKA Marin, East Harlem, New York

The cohort for the pilot program was geographically diverse, and projects include a mix of single-family, multifamily low rise and multifamily high rise construction typologies and diversity in resident populations (from families to seniors). Projects were in various stages of the pre-development process, with construction planned

to begin after the end of the pilot program, and each was chosen in part due to their project's timing being optimal to implement Criterion 1.2b during the grant period.

Each cohort member received a $10,000 grant to facilitate their partnership with a local public health professional, ready access to technical assistance from national experts and connection to a peer network from which to learn. The intention was for participants to benefit from deep technical support on a single housing project, with the expectation that they would then be able to apply the knowledge gained to future projects.

The Process Evaluation

The Enterprise/Health Impact Project team aimed to build the capacity of the five organizations participating in the project. Through both scheduled and ad hoc interactions with the pilot program participants, Enterprise sought to understand how implementing Criterion 1.2b influenced developer decision making and the kinds of assistance necessary to support future adoption of the criterion. In particular, the process evaluation of the pilot program was designed to assess changes in organizational capacity around: (1) organizational commitment to embedding health into site design and operations, (2) developing partnerships with public health professionals, (3) data collection and analysis, and (4) stakeholder engagement. In addition, Enterprise was interested in the value the developers saw in implementing Criterion 1.2b, the factors that influenced their design decision making and the likelihood that they would implement the criterion in future projects.

Data collection took place at various points during the 5-month pilot. A brief online assessment survey was administered at project start and, with some modifications, re-administered at project end to gauge changes in organizational capacity. In addition, cohort members participated in monthly Community of Practice calls, as well as one-on-one calls with the Enterprise/Health Impact Project staff. An exit interview was held with each organization and information about the resources invested in completing the requirements of the criterion were collected.

Conclusions

Participating in the pilot broadened the developers' understanding of the relationship between health and the built environment.

While most cohort members indicated that they valued the connection between health and the built environment in the baseline assessment survey, the experience of participating in the pilot program both broadened and deepened each group's understanding on how impactful the design of a building can be on resident health outcomes. To these groups, "health" came to mean much more than just the avoidance or management of disease and began to encompass issues such as safety and social isolation.

Community engagement is an essential part of the process and revealed unexpected insights.

Although not all cohort members were able to engage with key stakeholders during the period of the pilot program, those that did found the experience to be vital to their efforts to draft a meaningful Health Action Plan. Listening to community needs and priorities raised health concerns that were not well captured by the available public health data and provided an opportunity to ground truth the published data with community perceptions of a healthy neighborhood.

Partnering with a public health professional is important, but it takes time to find the right fit.

All of the groups indicated that the partnership they established had met their expectations and was a valuable resource. The majority of groups thought they were likely to engage a public health professional in the future, but emphasized the need to start the process early to allow sufficient time to identify a consultant and negotiate a scope of work. The cohort members relied on their consultants to identify health priorities in the community,

select health metrics for the Implementation and Monitoring Plan, and facilitate community stakeholder meetings. In addition, the public health professionals drafted the Health Action Plans and Implementation and Monitoring Plans for their development partners.

Health data can inform design decisions and should be considered early in the process.

While a number of affordable housing developers include health-promoting design features in their buildings, these decisions are often made without regard to the specific needs of a building's residents. Criterion 1.2b focuses this decision making on those features that may have the greatest impact on health by requiring a review of the available public health data and engagement with community stakeholders to surface any health priorities that may not have been reflected in the data. All of the cohort members noted the value of considering the health needs specific to their communities. For some, the data and community feedback reinforced design decisions already made; for others, the information learned drove additional health-promoting design decisions.

No group committed to implementing Criterion 1.2b in the future, although each had different reasons for being unable to do so.

All of the cohort members were reluctant to commit to implementing Criterion 1.2b in future projects and two potential barriers to implementation were identified – the need to engage a public health professional and the requirement to develop an Implementation and Monitoring plan. However, in listening to the developers' experience in the pilot program, it is clear that they will carry some elements of the Criterion 1.2b into their future work—particularly community and stakeholder engagement and the use of public health data to identify health priorities

Creating the Monitoring and Implementation Plan and the need for continued monitoring posed the greatest challenge for the pilot program participants.

All cohort members expressed concern about the need to develop a Monitoring and Implementation Plan, as well as the need to conduct long-term monitoring. Several issues were raised by the developer teams—the long-term commitment of staff and resources to conduct the monitoring; the difficulties in selecting metrics and creating a strategy for collecting and analyzing those metrics; and the purpose of developing a Monitoring and Implementation Plan so far in advance of construction and lease up. Part of the uncertainty around this requirement of Optional Criterion 1.2b is that few developers have formally evaluated the impact of their housing on residents, let alone the health of residents. Thus, developers had little context or practical experience with health monitoring or with a system in which to evaluate health impacts. Despite their concerns, four of the groups developed a Monitoring and Implementation Plan, and several indicated that they would rely on an annual resident survey to provide the data necessary to determine long-term impact.

To ensure success, implementing the criterion should be a seamless addition to the typical development process, rather than another requirement.

In observing the cohort members, it was clear that the process of designing and building affordable housing can be unpredictable and challenging. Implementing Criterion 1.2b became one more priority on a long list of priorities for the development teams. Embedding the requirements of the criterion into the development process and ensuring that developers start thinking about health early in that process may be key to scaling its adoption across the industry.

Next Steps

The pilot program provided Enterprise and the Health Impact Project with valuable findings on how partners implement Optional Criterion 1.2b and on the capacity-building effectiveness of the criterion. The evaluation of the pilot program pointed to several actionable steps that Enterprise could take to bolster the adoption of optional Criterion 1.2b and further embed health in the design of affordable housing across the United States. Enterprise is currently evaluating potential activities within the following categories:

Technical Assistance: Develop additional tools and templates to facilitate locating and partnering with a local public health professional, developing a Health Action Plan and selecting health metrics to include in the Implementation and Monitoring Plan.

Criterion Changes: Consider changes to the existing criterion to increase flexibility in selecting public health partners and to allow the addition of programming strategies to address health issues identified.

Health Action Plan Adoption in Affordable Housing Design: Explore additional ways to promote the Health Action Plan process, such as providing financial support for early adopters, supporting additional pilot engagements that span the entire project lifecycle and identifying system-level incentives to create additional demand for Health Action Plans.

Background

The Enterprise Green Communities Criteria

Enterprise Community Partners (Enterprise) launched its Green Communities initiative in 2004. The central element of the initiative is the Enterprise Green Communities Criteria (the Criteria), which is the leading green building standard for affordable housing in the United States. The Criteria have spurred the widespread use of healthy design and building practices across the affordable housing field and have been adopted by 25 states and eight major cities. As a result, many competitive funding streams that are critical to affordable housing development (state Housing Finance Agency Low-Income Housing Tax Credit Qualified Allocation Plans and/or municipal affordable housing finance products) list certification to the Criteria either as a requirement or a preferential condition of funding. Our Enterprise Green Communities Certification program, which verifies that a project has satisfied the requirements of the Criteria, launched in 2010. Presently, more than 99,000 housing units, located in 39 states, the District of Columbia and Puerto Rico, are in various stages of receiving Certification.

Enterprise published its fourth update to the Green Communities Criteria in 2015. This update includes best practices in active design, health-related criteria inspired by the Health Impact Assessment process and new standards for indoor air quality. Relevant to this project, the 2015 Criteria include two criteria within the Integrative Design category based on the Health Impact Assessment model: one mandatory criterion (Criterion 1.2a, *Resident Health and Well-Being: Design for Health*) and one optional criterion (Criterion 1.2b, *Resident Health and Well-Being: Health Action Plans*) to address resident health and well-being. Mandatory Criterion 1.2a requires that developers identify potential resident health factors and design their project(s) to address resident health and well-being by:

- Using readily accessible community health data sets and/or community engagement processes to identify at least one relevant Resident Health Campaign to address potential health issues, such as injury and accessibility, asthma and respiratory health, cardiovascular disease and diabetes, cancer and health outcomes related to toxic exposure, or mental health;
- Identifying building design and programming factors that can optimize the health of the residents; and
- Incorporating at least one optional criterion from other sections of the 2015 Criteria that is related to the selected Resident Health Campaign(s).

Optional Criterion 1.2b builds upon the above requirements and calls for the developer, at the pre-design phase of development and continuing throughout the project life cycle, to collaborate with public health professionals and community stakeholders to assess, identify, implement and monitor achievable actions to enhance health-promoting features of the project and minimize features that could present risks to health. As compared to satisfying the requirements of Criterion 1.2a, compliance with this criterion requires a more rigorous association with public health professionals and more robust follow-up action. Specifically, developers will:

- Create a Health Action Plan based on additional research on the resident health factors identified in Criterion 1.2a. Using public health data and community input, the Health Action Plan will characterize how the project may impact—both positively and negatively—social, environmental and economic outcomes for residents and, in turn, promote health or produce unintended negative consequences for health.
- Develop a project implementation and monitoring plan that includes a summary of the modifications made; performance metrics to be monitored; and specific information on indicators, data sources, frequency and roles and responsibilities for monitoring different information. The plan will enable the developer to evaluate the project's impact on resident health throughout the project life cycle.

The Pilot Program

Criteria 1.2a and 1.2b arose from a partnership between Enterprise Green Communities, the Health Impact Project—a collaboration of the Robert Wood Johnson Foundation and The Pew Charitable Trusts—and the U.S. Green Building Council aimed at streamlining and promoting the comprehensive and systematic consideration of health in the Enterprise Green Communities Criteria and the Leadership in Energy and Environmental Design (LEED) certification programs. Enterprise and the Health Impact Project were interested in observing and evaluating the process by which community development corporations (CDCs) implemented Optional Criterion 1.2b. Funded by the Health Impact Project, Enterprise conducted a pilot program involving five CDC developers between July 2016 and December 2016. The purpose of the pilot program was to observe and support the process by which affordable housing developers use public health data and forge the key partnerships necessary to create a Health Action Plan and a Monitoring and Implementation Plan, the two components of Optional Criterion 1.2b. The knowledge gained through this pilot, and reflected in this evaluation report, will inform future efforts by Enterprise to develop tools and resources that will assist developers in implementing the health components of the 2015 Criterion.

Through the pilot program, each participating organization received a grant of $10,000 to assist with the implementation of Criterion 1.2b. In addition, Enterprise staff provided technical assistance, and members of the pilot program cohort also participated in a Community of Practice peer learning group. Through both scheduled and ad hoc interactions with the pilot program participants, Enterprise sought to understand how implementing Criterion 1.2b influenced developer decision making and the kinds of assistance necessary to support future adoption of the criterion. In particular, the process evaluation of the pilot program was designed to answer these key questions:

- How did the developers identify and use existing local health data and resources? What evidence informed the creation of their Health Action Plans?
- To what extent did the developers partner with local health providers and public health professionals?
- To what extent did the developers engage community stakeholders? Who were the most relevant voices at the table?
- How did the developers staff this activity and delegate the roles and responsibilities required?
- What amount and types of resources did the developers use to complete the requirements of Criterion 1.2b?
- How reliant were the developers on the technical assistance provided? Was the right type of expertise provided (i.e., public health professionals) or would they have benefitted from additional expertise? Was the provision of technical assistance crucial to the successful implementation of the criterion?
- What was the value of the kick-off meeting and monthly Community of Practice calls?
- What factors in the process influenced decision making?
- What did the developers perceive to be the primary value gained through implementing Optional Criterion 1.2b?
- Do the developers anticipate implementing Criterion 1.2b on future projects?

Grant Selection Process

The participating organizations were selected through a competitive process, with a request for proposals issued in June 2016 (see Appendix A). As stated in this request, selected CDCs would receive technical and financial support, with ready access to technical assistance from national experts, funds to facilitate partnering with a local public health professional and a connection to a peer network from which to learn. The intention was for

participants to benefit from deep technical support on a single housing project, with the expectation that they would then be able to apply the knowledge gained to future projects.

A total of 12 proposals were received, and five were selected based on the following evaluation criteria:

- Development project schedule, providing evidence that it would be appropriate and feasible to implement Criterion 1.2b during the period of performance of this grant
- Thoroughness and comprehensive nature of the proposal
- Demonstrated experience in developing affordable housing
- Commitment to addressing resident health outcomes through housing solutions

In addition, Enterprise sought to select participants that offered a variety of project locations, construction types and target resident populations. The following organizations were selected to participate in the Health Action Plan pilot program:

- Grant Housing & Economic Development Corporation, Los Angeles, California
- Gulf Coast Housing Partnership, Inc., Hammond, Louisiana
- Latin United Community Housing Association, Chicago, Illinois
- Mercy Housing Southeast, Atlanta, Georgia
- SKA Marin, East Harlem, New York

The Pilot Program Cohort

The pilot program cohort was geographically diverse, with projects representing a mix of single-family and multifamily construction. Although it would have been ideal to include some rehabilitation projects, all proposals submitted were for new construction projects. The projects chosen were in various stages of the pre-development process, with construction planned to begin after the end of the pilot program. The following sections highlight key aspects of each CDC and its proposed project.

Grant Housing & Economic Development Corporation (Grant HEDC)

Grant HEDC is based in the Watts neighborhood of Los Angeles, a culturally rich, urban core neighborhood. Grant HEDC was founded in 1992 by members and affiliates of the Grant African American Methodist Episcopal Church to assist people in Watts and South Los Angeles. Current Grant HEDC programs focus on constructing new affordable housing, managing existing affordable housing, and carrying out new commercial development in Watts – combining job creation, employment training and private investment partnerships. Together with the Natural Resources Defense Council's Urban Solutions program, Grant HEDC created the Watts Re:Imagined initiative to focus on the intersection of sustainability and quality of life, social equity and economic development.

Park Gateway's health-conscious and sustainable housing will help low-income and formerly incarcerated residents by providing access to community amenities that encourage individual and community empowerment and healthy living.

The proposed project, **Park Gateway**, will include 76 affordable housing units and provide supportive services to formerly incarcerated residents who need them. In addition, the site will include 13,300 square feet of commercial retail space. Amenities include a central courtyard with playground, computer lab, bank, restaurants, youth dance academy, and community-serving retail focused on health and wellness.

Gulf Coast Housing Partnership, Inc. (GCHP)

GCHP is among the highest capacity nonprofit housing and community development organizations in the Gulf South. It has created or preserved over 2,150 housing units in Louisiana, Mississippi and Texas since 2006. GCHP focuses on the creation and preservation of housing for low-income families, as well as holistic community development. In the last 10 years, GCHP has invested over $270 million in the communities it serves and has developed over 2 million square feet of transformational real estate development.

Phoenix Square, located in Hammond, Louisiana, will comprise 40 single-family detached homes on an 11.4-acre infill site. The project includes the construction of 1,200 feet of new roadway and infrastructure but will leave over two acres of the site as wooded green space. Homes in the Phoenix Square community will include two 800-square-foot two-bedroom homes and thirty-eight 1,100-square-foot three-bedroom homes. The development is designed with prominent front porches, reduced setbacks and wide sidewalks to promote walking and to take advantage of the mature live oak trees throughout the property.

Specific site challenges include the presence of wetlands, a flood hazard area and the unknown nature of the soils used to fill the site after its previous use as an oxidation pond in the 1960s.

Latin United Community Housing Association (LUCHA)

Located in Chicago, Illinois, LUCHA was founded in 1982 by residents of the Humboldt Park, West Town and Logan Square neighborhoods to combat displacement and preserve affordable housing in the community. Since its founding, LUCHA has helped more than 68,000 low-to-moderate income families by developing and managing affordable housing; providing counseling to new home buyers, as well as those facing foreclosure or credit difficulties; offering supportive services; and assisting with repairs for seniors and low-income households.

The **Tierra Linda** project will be LUCHA's first official development to be structurally and programmatically focused on health and wellness. Situated near the 606, an elevated trail that unites four separate Chicago neighborhoods, the Tierra Linda development is ideally located to open space and parks, public transportation and healthy food options. Plans call for the construction of 45 units across 12 sites. Individual buildings will include either three or six flats of one, two or three bedrooms.

LUCHA, which is the Spanish word for "struggle" advances housing as a human right by empowering communities – particularly the Latino and Spanish-speaking populations – through advocacy, education, affordable housing development and comprehensive housing services.

Mercy Housing Southeast (MHSE)

Founded in 1981 by the Sisters of Mercy in Omaha, Nebraska, Mercy Housing, Inc., is the largest nonprofit affordable housing organization in the United States. MHSE is the youngest regional office of Mercy Housing and is headquartered in Atlanta, Georgia. Since 1996, MHSE has developed or preserved 34 projects delivering 3,200 affordable rental homes. MHSE specifically focuses on providing service-enriched housing for low-income seniors.

MHSE is developing the **Senior Residences at Mercy Park**, a 77-unit property, which will be paired with a 40,000-square-foot health care facility being developed by its partner, Mercy Care. Located in Chamblee, Georgia, the four-acre site is less than two blocks away from the Metropolitan Atlanta Rapid Transit Authority (MARTA) transit station. Low-income seniors will have care management and a full complement of health and wellness services on the campus. The project will include distinctive amenities that will integrate seniors into the larger community, enable seniors to age in place, accommodate ancillary services and promote senior living sustainability.

MHSE is committed to helping low-income seniors by developing housing designed to address a continuum of health-related needs and providing easy access to wellness clinics, health education, fitness and adult day care.

SKA Marin

SKA Marin is a leading affordable housing development and ownership firm in New York, having developed or managed the construction of more than 6,500 units of low-income housing. Senior housing with supportive services is an SKA Marin specialty, and the company has collaborated with the New York City Health + Hospitals Corporation on three previous projects. The **Gilbert on First**, located at 1912 First Avenue in East Harlem, is the fourth such collaboration.

The project will consist of 152 units of affordable multifamily rental housing for families at various income levels. The apartment mix will include studio, one-, two-, and three-bedroom units, ranging in size from 350 to 950 square feet. The Gilbert will have an outdoor children's play yard, rooftop terrace and front garden and an onsite wellness center. The location of the building will also afford its residents easy access to Metropolitan Hospital, which is located across the street, public transportation, schools, social services and an established residential community.

The Pilot Program Experience

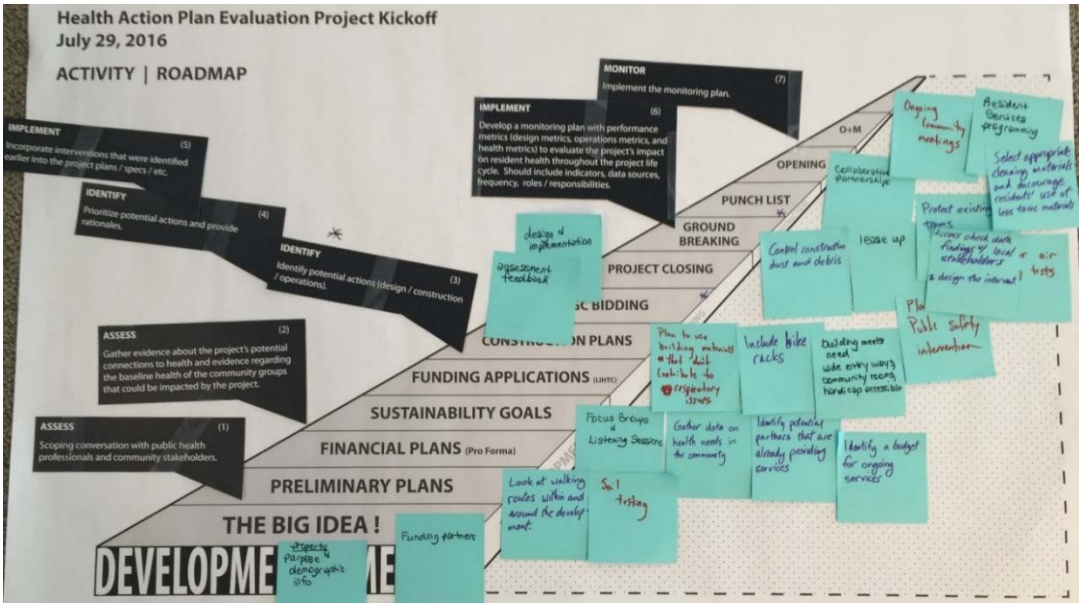
Enterprise and the Health Impact Project provided both formal and informal opportunities for interaction with the cohort. A kick-off meeting enabled the developers to get to know one another, as well as staff from the Enterprise/Health Impact Project team. Regularly scheduled Community of Practice calls were held monthly, and the groups were encouraged to share their experiences with one another. Formal one-on-one calls occurred at the midpoint of the project and then again at the end, and informal calls provided ad hoc technical assistance. These individual calls provided the Enterprise/Health Impact Project team the opportunity to better understand the challenges the groups faced in balancing the requirements of Criterion 1.2b with the realities of affordable housing development. This section of the report describes in more detail the pilot program experience.

The Kick-Off Meeting

The project kicked off with an initial meeting of the pilot program participants in Washington, DC, on July 29, 2016. Appendix B includes the agenda and participant list for the meeting. At least one representative from each development team was present, as well as staff from Enterprise, the Health Impact Project and the U.S. Green Building Council. At that meeting, the group heard from Enterprise staff about the development of the 2015 Criteria, the importance of embedding health considerations in design decisions to enhance resident health outcomes through the built environment and the purpose of the pilot program. Staff from the Health Impact Project introduced participants to the Health Impact Assessment framework, discussed how to obtain and interpret public health data and emphasized the importance of collaborating with a public health professional throughout the pilot.

Each development team presented its project and conveyed what they hoped to gain from the pilot. They then engaged in several exercises to spur their thinking in terms of health and its connection not only to the built environment, but also, more specifically, to the development process itself. In one exercise, participants were asked to map out where they thought the steps associated with implementing Criterion 1.2b would fall along a roadmap of a project's life cycle (see Figure 1). They were then asked to identify where along this roadmap potential health-promoting strategies could be adopted. This activity served to operationalize the relationship between health and the built environment for the developers within the context of the world in which they navigate day to day.

Figure 1. Development Roadmap



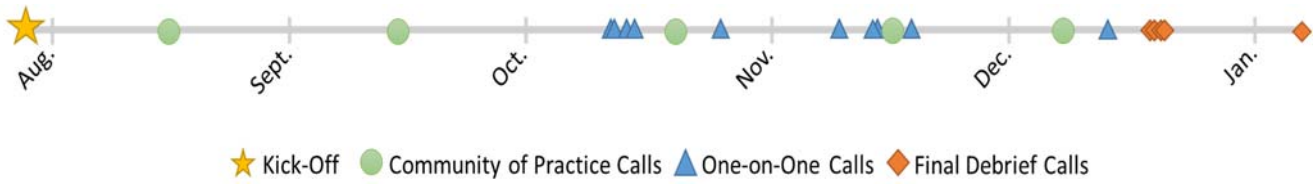
A Community of Practice

One goal of the pilot program was to encourage and facilitate peer learning. To achieve this goal, monthly community of practice calls were held between August and December. During these calls, each group was invited to share their successes and challenges and to learn from the experiences of their colleagues. Staff from Enterprise and the Health Impact Project joined these calls to answer questions and to provide technical assistance. These calls served as a data collection opportunity for the pilot program evaluation as the developer teams discussed their challenges and successes. Through these calls, Enterprise and the Health Impact Project staff were also able to stay abreast of changes in the development process and gage their impact on completing the steps of a Health Action Plan. For example, one developer had to take a break from solidifying a relationship with a public health professional to secure project funding when a planned-for source did not materialize. Real world circumstances such as this offered important insights into how developers might implement Criterion 1.2b while responding to the inherent uncertainties of affordable housing construction.

As a complement to the monthly calls, one-on-one calls with each development team were conducted at the midpoint of the project, followed by an exit interview at the conclusion of the project. With one exception, Enterprise provided a few hours of individualized ad hoc technical assistance to the groups each month, an amount typical of that offered to developers new to the Green Communities certification process. Enterprise provided an additional 15 hours of support to MHSE to assist them in engaging a health-focused architect.

Figure 2 summarizes the number and types of interactions the Enterprise/Health Impact Project team had with the cohort members along the timeline of the pilot program. As illustrated in Figure 2, the frequency of one-on-one calls with the individual teams peaked in October and November as they worked through the creation of their Health Action Plan and the accompanying Monitoring and Implementation Plan.

Figure 2. Cohort Interactions during the Pilot Program



Evaluation Data Collection

In addition to data collected during the above described discussions with the cohort members, more formal data collection methods were conducted to document the time and resources spent by each group in implementing Criterion 1.2b and to assess whether the support provided and the knowledge gained through implementing the criterion had increased the organizational capacity of the pilot participants along four key dimensions:

- Organizational commitment to embedding health into site design and operations
- Experience in forming partnerships with public health professionals to maximize health outcomes
- Ability to collect, analyze and interpret data
- Experience with engaging stakeholders to maximize health outcomes

DATA COLLECTION

Data collection took place at various points and in various forms.

- ✓ Baseline Survey
- ✓ Kick Off Meeting
- ✓ Community of Practice Calls
- ✓ One-on-One Calls
- ✓ Final Survey
- ✓ Exit Interviews
- ✓ Time and Expense Tracking

Enterprise developed an Organizational Capacity Matrix (Figure 3) as an evaluation tool to assess each cohort member's capacity along the four dimensions identified. A brief assessment survey was administered via an online survey platform at project start and, with some modifications, re-administered at project end. One person from each group completed the survey on behalf of his or her organization; in most cases, both surveys were completed by the same person. Using the Matrix as a guide, Enterprise evaluated the pre- and post-survey responses to determine the organizations' movement along the awareness continuum for each dimension before and after participating in this pilot project.

Figure 3. Organizational Capacity Matrix

	Organizational Commitment *Embedding health into approach to site design and operations*	**Partnerships** *Partnerships with public health professionals to maximize health outcomes*	**Data Collection & Analysis** *Ability to collect, analyze and interpret data*	**Stakeholder Engagement** *Engaging stakeholders to maximize health outcomes*
Consistently Apply	Deep organizational commitment to resident and community health outcomes as evidenced by a formal policy and dedicated staff and project resources at an organizational level.	Ongoing partnership with public health professionals. Partnership has resulted in the implementation of health-enhancing design features or programming in at least one project.	Consistently collects (or accesses) health-related data and uses that data to inform decision making.	Consistently engages with stakeholders around health issues.
Act	Demonstrated organizational commitment to resident and community health outcomes as evidenced by dedicated staff or project resources at project level.	Partnered with a public health professional on at least one project. Partnership resulted in the implementation of health-enhancing design features or programming in at least one project.	Has collected (or accessed) health-related data but does not do so consistently.	Engages with stakeholders on particular issues, but lacks experience (or has limited experience) engaging around health issues.
Intention or Willingness to Act	Lacks a formal policy and dedicated staff and resources, but expressed interest in increasing focus in the future.	Interested in partnering with a public health professional, but has not yet done so. Intends to partner in the future.	May have collected (or accessed) health-related data in the past, but no longer does so. Expresses interest in using data but is unsure of how to do so.	Has not engaged stakeholders around health issues, but expresses interest in doing so.
Awareness	Somewhat aware of connection between health and housing. Has not dedicated staff or project resources and did not indicate a willingness to do so.	Has not yet partnered with a public health professional and does not intend to do so.	Neither accesses nor collects health-related data and identifies significant barriers to doing so.	Does not engage with stakeholders around health issues and rarely engages with stakeholders on any issue after project completion.

Case Studies

In addition to observing how the different members of the cohort went about implementing Criterion 1.2b, the Enterprise/Health Impact Project team was keenly interested in whether the support provided led to an increase in organizational capacity that would be sustained, thus enabling the five cohort members to create Health Action Plans and Implementation and Monitoring Plans for future projects. Building this capacity is essential to embedding health firmly in the life cycle of an affordable housing project. Much of what was observed and the lessons learned were central to the organization's capacity to execute the steps associated with the implementation of Criterion 1.2b.

The case studies presented in this section are organized around the four dimensions of organizational capacity that were measured at the beginning and the end of the pilot program (see Figure 3). A project timeline is also included which provides insights into how each group managed the various tasks associated with the implementation of Criterion 1.2b. As can be seen in reading the case studies, each developer took a different approach, and the experiences of each group offered valuable insights into how Enterprise and the Health Impact Project might make the adoption of Criterion 1.2b attractive to affordable housing developers and how best to support future implementation efforts.

All of the developer teams increased their organizational capacity in at least one dimension. Every group gained a deeper appreciation of how the built environment can influence resident health outcomes. Most gained the ability to partner with a health professional in the future, and several expected to continue the partnership they formed during the pilot. Those groups that engaged community members found the experience to be a critical complement to published health data and believed that they had gained the skills needed to conduct community meetings in the future. The one dimension along which most groups did not substantially increase their capacity was data collection and analysis. The developer teams relied on their public health partners for data collection and analysis, and most expressed that they would continue to rely on their public health partners for data analysis. Some groups did commit to conducting an annual resident survey as part of the Implementation and Monitoring Plans, but expected to engage a third party for analysis of the results. This is not a surprising finding, given that data collection and analysis is likely to be a new skill set for most affordable housing developers.

Grant Housing and Economic Development Corporation

PROJECT TEAM:

Chris Jordan, Grant HEDC

Frank O'Brien, Grant HEDC

Marissa Ramirez, Natural Resources Defense Council

Kristen Pawling, Natural Resources Defense Council

PUBLIC HEALTH PARTNER:

Raimi + Associates

Developing the [Health Action Plan] was useful in demonstrating that the development project is not contributing to the displacement of residents. We also learned that encouraging stair access to each building floor contributes to the fight against cardiovascular diseases, diabetes and obesity.

Chris Jordan, Grant HEDC

SELECTED FEATURES OF THE HEALTH ACTION PLAN	
Health Concern	**Potential Strategy**
Injury and Accessibility	Safe sidewalks and other infrastructure; outdoor safety; physical accessibility to the site and building; fall prevention features; traffic-calming features
Asthma and Respiratory Health	Indoor air quality; indoor humidity and temperature; mold prevention; no-smoking policy
Cardiovascular Disease and Obesity	Access to safe, affordable places to be active; walkability
Cancer and Health Outcomes Related to Toxic Exposure	Limit exposure to toxins both indoors and outdoors
Mental Health (Substance Addictions, Stress)	Views of nature (e.g., natural lighting, green spaces); secure buildings and grounds; reduced noise levels

Note: As of December 2016, the site design of the Park Gateway development was not final. However, the comprehensive menu of possible health benefit design elements will be included in final building and site design decisions. Project funding has been delayed, and final development plans will not be finalized until late 2017.

Organizational Commitment

Grant HEDC partnered with the Natural Resources Defense Council's (NRDC) Urban Solutions program in 2012 to create Watts Re:Imagined, an initiative designed to promote a vibrant, thriving community focused on sustainability, social equity and economic development. Recognizing that Watts has among the most serious public health conditions of urban core communities in the United States, Grant HEDC had begun a process of addressing these concerns prior to being selected for the pilot program. Together, Grant HEDC, NRDC, and Raimi & Associates created a Watts Wellness action plan which they proposed to Kaiser Permanente, a local health care provider.

Participating in the pilot strengthened Grant HEDC's commitment to maximizing resident health outcomes in its future projects. The Project Manager considered the experience and the knowledge gained through the pilot program to be a springboard for future work. The information gathered will inform and help to shape future directions. The Grant HEDC Executive Director found that the experience of creating a Health Action Plan forced him to dig deeper into those things that can make a significant impact on health, beyond the basic requirements. Everyone on the Grant HEDC team valued the pilot program experience and emphasized the importance of making the connection between health and the built environment, but expressed concern about having the resources (both time and money) to formally address this connection moving forward. Both the Executive Director and the Project Manager found that the resources provided by the grant were insufficient to enable them to spend as much time as they would have liked on the pilot and limited the scope of what their public health professional could do. Despite these challenges, the Executive Director indicated that Grant HEDC is likely to implement Criterion 1.2b in the future, given its alignment with the overall goals of the Watts:Reimagined initiative.

Partnerships

Grant HEDC had an established partnership with its public health professional, Raimi + Associates, prior to being selected for the pilot program. Raimi + Associates had participated in the development of the Watts Wellness plan, as well as the Plan for a Healthy Los Angeles. In addition, Grant HEDC had existing relationships with the City of Los Angeles Housing Authority and its Choice Neighborhood Initiative for Jordan Downs and the Watts Century Latino Organization. During the pilot program, the Grant team reached out to Kaiser Permanente and other local health services to identify future partnership opportunities.

While the Grant team had engaged Raimi + Associates as its public health professional early on, negotiating a scope of work proved to be more difficult than anticipated. The final contract was signed in November 2016 and did not include development of an Implementation and Monitoring Plan. Delays in securing funding for the Park Gateway project may have contributed to the difficulties in reaching an agreement with Raimi, as the need to complete the Health Action Plan took a back seat to the need for obtaining project funding.

Raimi provided the Grant team with neighborhood-level and county-level health data, identified priority health issues in the community, offered feedback on the potential impact of design choices on resident health outcomes and drafted the Health Action Plan. Of these activities, Grant HEDC found the drafting of the Health Action Plan to be the most valuable service that Raimi provided. In addition, working with Raimi enhanced the Grant HEDC's team understanding of the connection between health and housing. The Executive Director found that going through the data with Raimi staff and being exposed to their perspective on the nexus between health and housing was useful in making the case for better alignment of these two sectors.

Data Collection and Analysis

Although the Grant team had access to a substantial amount of health data relevant to the Watts neighborhood, the team had been focused on building a healthy and sustaining community in Watts through coordinated initiatives encompassing affordable housing, green infrastructure and public health and service programs, such as job training and family financial planning. The team had not considered that its Park Gateway development had the potential for incorporating elements beneficial to the health of the community. By participating in the pilot program, the Grant team, in concert with its public health consultant, reviewed existing data sources, such as the LA City Health Atlas and the California Health Interview Survey, and developed a list of priority health issues and devised both design and programming strategies to address them. Because the building and site final design has not yet been determined and funding is still being secured, the Grant team was unable to narrow the focus of its Health Action Plan to designate strategies specific to the Park Gateway project or to complete a Monitoring and Implementation Plan. However, the creation of a broader Health Action Plan will be used to inform continued development in the neighborhood, as well as to advocate for health-promoting measures outside of the control of Grant HEDC, such as the enforcement of zoning regulations to relocate harmful and incompatible land uses. The team also outlined the steps it will take to develop a Monitoring and Implementation plan once the building design is finalized. Grant HEDC intends to implement the monitoring plan once construction is completed and the building is leased up.

> *We found [developing the Health Action Plan] valuable and enlightening. The information compiled as a result will inform and help to shape our direction going forward.*
>
> *Chris Jordan, Grant HEDC*

Stakeholder Engagement

Stakeholder engagement was an important part of the initial planning for the Watts:Reimagined initiative. Residents, local businesses, community organizations and city representatives had the opportunity to share their vision of what they wanted their community to become—a pedestrian-friendly neighborhood with restaurants and shops showcasing local businesses and artists, green parks and courtyards, and access to multiple modes of transportation. A formal design charrette was held early in 2014 and helped to shape plans for 103rd Street, a key corridor of the Watts neighborhood.

To engage stakeholders specifically about health issues facing residents of the area encompassing the Park Gateway development, Grant HEDC decided to participate in a community health fair being planned by the Charles R. Drew University of Medicine and Science in East Los Angeles. Originally scheduled for late November or early December, the health fair was delayed until sometime in 2017, which limited the opportunity to include

feedback from community stakeholders in the development of the Grant HEDC Health Action Plan. In discussing this missed opportunity, the Project Manager for Park Gateway reflected that, in retrospect, he wished that they had not relied on the health fair as the exclusive means of community engagement since its delay represented a missed opportunity. On the other hand, he believed that piggybacking onto a scheduled community event would lead to greater involvement than if they had promoted one on their own because residents have a limited amount of time to attend these types of gatherings.

Project Timeline

The Gantt chart below provides a visual display of the point at which Grant HEDC undertook the individual activities related to implementing Criterion 1.2b and the weeks in which the staff worked on those activities.

	ACTIVITIES	25-Jul	1-Aug	8-Aug	15-Aug	22-Aug	29-Aug	5-Sep	12-Sep	19-Sep	26-Sep	3-Oct	10-Oct	17-Oct	24-Oct	31-Oct	7-Nov	14-Nov	21-Nov	27-Nov	5-Dec	12-Dec	19-Dec	26-Dec
ASSESS	Scoping conversation with public health professionals and community stakeholders.																							
ASSESS	Gather evidence about the project's potential connectiosn to health and evidence regarding the baseline health of the community groups that could be impacted by the project.																							
IDENTIFY	Identify potential actions (design/construction/operations).																							
IDENTIFY	Prioritize potential actions and provide rationales.																							
IMPLEMENT	Incorporate interventions that were identified earlier into the project plans/specifications/etc.																							
IMPLEMENT	Develop a monitoring plan with performance metrics (design metrics, operations metrics, and health metrics) to evaluate the project's impact on resident health throughout the project life cycle.																							

NOTE: The Gantt chart is not an indication of the time spent working on a task, but rather an indication that the task was worked on at some point during the identified week for an unspecified number of hours.

Gulf Coast Housing Partnership, Inc.

PROJECT TEAM:

David Harms, Project Manager

Kevin Krejci, Marketing & Communications Manager

Matt Wilson, Vice President, Risk Management

PUBLIC HEALTH PARTNER:

Andrew Ryan

Community meetings were vital, since much of the data we could find was county level, rather than neighborhood level. People know what they are concerned about in their neighborhoods.

David Harms, GCHP

SELECTED FEATURES OF THE HEALTH ACTION PLAN	
Health Concern	**Strategy Adopted**
Adult Obesity/Physical Inactivity	Install mile markers on sidewalks and walking paths; provide community bike rack to encourage use of bikes; design green space so as to encourage physical activity; partner with local fitness center to provide access to tenants
Drowning Risk for Children Posed by Two Drainage Canals on Property	Utilize existing bamboo overgrowth to build a green wall as barrier to canal
Violent Crime	Install security cameras and lighting throughout property
High Incidence of Sexually Transmitted Diseases	Provide information on how to access free prophylactics
High Prevalence of Single Parent Households	Create a comprehensive health marketing plan and close partnerships with Head Start, Heritage Museum, and Clayton Mickson Center to provide child care, feeding, tutoring, etc.

Organizational Commitment

The GCHP team came into the pilot with a strong commitment to resident health. Recognizing that the Gulf Coast is at the bottom of the nation in most public health statistics, GCHP has a formal policy to maximize health outcomes in all its project designs and sees the value of taking a holistic approach to positively affecting resident and community health. All staff members are responsible for improving resident health as part of their jobs.

Participating in the pilot program reinforced GCHP's existing commitment to improving health through design decisions. In the case of the Phoenix Square development, many of the design decisions had been made before GCHP was selected for the pilot, but working through the process of developing the Health Action Plan provided clarity around the health interventions that were considered. In addition, the process served to both broaden and focus the team's definition of what constitutes health. Before the pilot, health was thought of in a traditional disease-based framework – obesity, diabetes, etc. Going through the process broadened this thinking to include the impacts of environmental and location features on what the community considers to be a health priority. For Phoenix Square, its proximity to the canals was a much more immediate health and safety concern and one that could be addressed through site design decisions. In addition, GCHP staff recognized that many resources in the community could potentially enhance resident health, a fact that might have been overlooked had they not been engaged in developing a Health Action Plan.

> *I previously saw health as obesity, cardiovascular disease, etc. and I think that this project took me to a more concrete place on what exactly we should be thinking about not just in terms of broad ways the built environment affects these diseases, but in more immediate ways, like access to the canals [a potential safety hazard].*
>
> *David Harms, GCHP*

Despite its positive experience in going through the pilot, GCHP staff could not commit to implementing Criterion 1.2b in the future. Because the organization typically has no trouble accumulating optional points to achieve Green Communities certification, it is more likely to choose criteria with easier documentation and less ongoing commitment. However, the GCHP team did note that future efforts to implement Criterion 1.2a (the mandatory health criterion in the 2015 Criteria) will be far richer and more meaningful as a result of completing the pilot.

Partnerships

Prior to the pilot, GCHP had not partnered with a public health professional because it had not thought to do so. However, in preparing its proposal, GCHP partnered with a local public health professional. The partnership arose from previous contact between the public health professional and the GCHP Project Manager. The formation of this partnership so early in the process enabled the public health professional to participate in the kick-off meeting and to pursue certain aspects of the project, such as community engagement, sooner than the other cohort members.

Both parties felt the partnership was a success. The public health professional supported the project by identifying priority health issues in the community, identifying health metrics for the Implementation and Monitoring Plan, facilitating community meetings and drafting the Health Action and Implementation and Monitoring Plans. The Project Manager appreciated the flexibility of the public health professional in defining a scope of work and willingness to have a regular "back and forth" discussion as things came up.

The positive experience in working with a public health professional made GCHP Project Manager more likely to do so in the future. Prior to participating in the pilot, the Project Manager was unsure that someone without a design background could have a positive impact on the development process. After working with the public health professional, the Project Manager now believes that it is possible for such an individual to provide design input in a way that is consistent with the project budget and positively contributes to the project's quality. However, the success of such a partnership may depend on background of the public health professional. In the case of GCHP, the public health professional had some construction experience, which the Project Manager believed contributed to his successful integration into the project team.

Data Collection and Analysis

GCHP occasionally used public health data on a project-by-project basis prior to participating in the pilot program, but staff were unsure about how to use the data to inform decision making. GCHP did not collect health data on its residents and cited three reasons for not doing so: concern about privacy regulations, concern about resident reaction and a lack of resources. In the baseline survey, GCHP expressed apprehension about the ongoing data collection requirements of Criterion 1.2b and hoped that the pilot would offer innovative strategies for collecting data in a way that (1) is not onerous in terms of the resources required of the property owner and (2) did not require GCHP to hold data that could be in violation of the fair housing law.

As a result of the pilot, GCHP increased its organizational capacity in this area. Participating in the program sparked internal discussions about how to collect relevant data within existing capacities, and GCHP is now planning to collect resident health data at each tenant's lease renewal as part of the Implementation and Monitoring Plan. Staff are also more likely to use publicly available health data sources (e.g., county health rankings), as well as local data sources (e.g., hospitals, county health department, police), to better understand the needs of the communities in which they will build in the future. GCHP staff recognize the importance of collecting data as part of the Implementation and Monitoring Plan as a means of tracking the impact of design decisions at Phoenix Square, but remain unsure how such data will be used to inform future decision making. The Project Manager did highlight the value of including design, operational and health metrics in the Plan. While most developers collect data in support of operational metrics, particularly to save energy costs, the opportunity to consider design and operational metrics in conjunction with the health metrics further reinforced the relationship between the design and operation of a building and resident health.

Stakeholder Engagement

Stakeholder engagement around the Phoenix Square project proved to be extremely important to GCHP. In fact, staff identified it as the data source that best informed the Health Action Plan. The GCHP Project Manager and the public health professional met with neighborhood stakeholders, including staff at a local wellness center,

the head of the local Head Start and staff from a local cultural museum. These meetings were intended to help the GCHP team learn about possible programming that could be offered to Phoenix Square residents, as well as to gain additional perspectives about community health concerns.

Reviewing the community health data provided the GCHP staff with an initial picture of the community, which they were then able to ground truth when meeting with various stakeholders. One example of the value of this effort was the crime data for Hammond, Louisiana. These data indicated a high incidence of crime in the community but, when asked about it, residents felt that the neighborhood was extremely safe and expressed their concern about other threats, such as the potential for children to drown in the canals. Discussing the data with community members can lead to a different set of priorities than one based on the data alone.

The public health professional shared that he had to be very persistent in his efforts to engage community stakeholders. In some cases, he contacted them up to 15 times, impressing upon them that GCHP was part of a national pilot program and encouraging them to be part of this pioneering effort. The public health professional also found that he was not always connected to the right person at first. Again, through perseverance, he ultimately made those critical contacts with key community stakeholders. Both he and the GCHP Project Manager strongly emphasized that the investment of time was worthwhile, given the wealth of information that community members brought to their discussions and the long-term relationships they forged that will benefit the future residents of Phoenix Square.

Project Timeline

The Gantt chart below provides a visual display of the point at which Grant HEDC undertook the individual activities related to implementing Criterion 1.2b and the weeks in which the staff worked on those activities.

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NOTE: The Gantt charts are not an indication of the time spent working on a task, but rather an indication that the task was worked on at some point during the identified week for an unspecified number of hours.

Latin United Community Housing Association

PROJECT TEAM:

Juan Carlos Linares, Executive Director, LUCHA

Charlene Andreas, Director of Building Development, LUCHA

Sughey Ramirez, Development Assistant, LUCHA

Landon Bone Baker Architects

PUBLIC HEALTH PARTNER:

Illinois Public Health Institute

We had two goals going into the pilot. The first was to test materials and systems in the built environment and determine actual benefits, over a number of years, for households with health issues and to learn best practices for future projects. Our second goal was to clearly understand the health issues and the various factors that our organizations and its partners can impact and to be able to clearly document and share those impacts.

Charlene Andreas, LUCHA

SELECTED FEATURES OF THE HEALTH ACTION PLAN	
Health Concern	**Strategy Adopted**
Active Living	Provide programming around activities on the 606/Bloomingdale trail; partnership with Simons Park for programming; community calendar of physical activity programming and events; organized bike rides; public bike share cards; walking groups; walking maps; wall-mounted bike racks in-unit; groundcover to allow kids to run/ride bikes around the full perimeter of the building
Healthy Eating	Provide culturally-responsive cooking classes; community gardening efforts; LUCHA resource HUB for info on healthy eating and living programs/options; health fellow connecting tenants to resources and public benefits
Stress, Depression and Mental Health	Buddy system among residents; bulletin boards and community newsletter to advertise events and foster community; provide access to community-based gyms and physical activity programming; effects of Active Living and Healthy Eating strategies
Respiratory Health, including Asthma	No carpet; no smoking policy in Tierra Linda buildings; no pet policy; higher particulate filter on furnaces; annual duct cleanings; low VOC materials; cellulose insulation; provide information on VOC and chemical absorbing plants; no allergen plants/trees for outside garden; partner with Chicago Asthma Consortium on workshops and management of asthma; incorporate integrated pest management; resident engagement around healthy living and green design; workshop about green cleaning products

Organizational Commitment

LUCHA identified health and wellness as its focus for the Tierra Linda project prior to joining the pilot. Relocation of residents from another property in 2012 caused the LUCHA staff to realize the importance for healthier buildings and resident assistance. The proximity of Tierra Linda to Chicago's 606/Bloomingdale Trail provided additional incentive for embedding health-promoting features into the project. Based on their experience, LUCHA staff recognize the impact that healthy living can have on stabilizing a household.

Despite their understanding of the connection between health and the built environment, LUCHA staff indicated on the baseline assessment survey that resource constraints had prevented them from including health-related design features in their project budgets. However, new leadership at LUCHA has led to a renewed interest in improving how their housing and services impact resident health. The Director of Building Services, the Executive Director, and the Asset Manager are all passionate about providing residents with healthy homes and encouraging them to pursue healthy lifestyles.

I am very surprised at how well the pilot has worked out. I am interested in learning what we will get out of this experience in terms of health outcomes, how we can share our findings with others and how we can add a permanent member to our staff to provide a public health lens to our work.

I am so glad we participated in the pilot and look forward to seeing it through.

Juan Carlos Linares, LUCHA

Participating in the pilot strengthened LUCHA's organizational commitment to considering the health of its residents in future design decisions. LUCHA is now planning to put a formal policy in place to maximize health outcomes in all project designs and has received a grant from Enterprise to hire a Health and Wellness Coordinator to implement and monitor the programming aspects of the Tierra Linda development. In addition, LUCHA intends to designate resources for health-related design features in its future work and is likely to implement Criterion 1.2b in future projects, assuming that sufficient funding is available to engage a public health professional.

Partnerships

Finding a public health professional to partner with was the biggest challenge for the LUCHA team. Unlike some of the cohort members, LUCHA had not previously partnered with a public health professional—with an organizational focus on housing rights, LUCHA staff had no reason to connect with such professionals. Once the team started to look for a public health professional to partner with, they quickly realized how large the field was in the Chicago area. It took multiple meetings and discussions to find a consultant who understood the scale of the project and was experienced in community outreach.

Ultimately, LUCHA selected the Illinois Public Health Institute (IPHI) to partner in this work. They chose IPHI because IPHI staff had recently completed a health impact assessment with several local hospitals. IPHI also had housing knowledge and experience convening community groups. Another advantage was that IPHI was local to the Chicago area, which was important to the LUCHA team since staff were new to this type of partnership. IPHI performed several tasks for LUCHA, including the following:

- Provided neighborhood-level and county-level health data
- Identified priority health issues in the community
- Took the lead in facilitating community meetings
- Drafted the Health Action Plan
- Drafted the Implementation and Monitoring Plan

The LUCHA team considered the partnership with IPHI a success. Through this partnership, LUCHA staff members gained knowledge about the health status of the residents in the neighborhoods in which they work and are now more confident in their understanding of the potential impact of health-promoting design features on resident health. Working with IPHI also made the LUCHA staff more aware of the vast array of available programming that can augment changes to the built environment and further enhance resident health.

Data Collection and Analysis

In terms of data collection and analysis, LUCHA came into the pilot with a history of collecting resident health data for specific purposes, although they lacked a comprehensive program for doing so. More specifically, LUCHA staff members collect data on their residents who are covered by insurance and their single room occupancy residents who have a disability. This latter data collection effort is a requirement of the federal funding they receive. LUCHA does not track health data for its family households, but does keep records on health-related requests for help. These data have not yet informed their decision making, but are expected to do so in the future, particularly with the addition of a dedicated Health and Wellness Coordinator to the staff.

As mentioned above, IPHI provided the LUCHA team with public health data for the community in which the Tierra Linda development is located. Drawing from both national (e.g., American Community Survey, U.S. Census) and local (e.g., Chicago Health Atlas, Illinois Hospital Association COMP data, Illinois Department of Public Health, Mortality Files) data sources, IPHI documented the key demographic and health status indicators of the area surrounding Tierra Linda and highlighted the relevant health inequities.

Like its other cohort members, LUCHA staff were particularly concerned about identifying the appropriate health metrics to include in the Implementation and Monitoring Plan. IPHI staff not only assisted in the selection of metrics, but were also sensitive to which metrics were feasible for a housing organization to collect, given concerns about the capacity of LUCHA to track a wide array of metrics. Ultimately, IPHI recommended an annual survey as a means of collecting self-reported data on residents' health care utilization, health living choices and physical and mental well-being.

Stakeholder Engagement

LUCHA's efforts to engage community stakeholders were both successful and informative. After one false start (a community meeting that was poorly attended due to the Cubs appearance in the World Series), LUCHA and IPHI held two community focus groups—one in the Logan Square community and one in the Humboldt Park community. The Logan Square community meeting was held at the McCormick Tribune YMCA and was conducted in Spanish. About 15 mothers and their children attended. The group participated in several interactive exercises designed to identify health issues that were important to them and to discuss the root causes of and contributing factors to these health challenges. The group also identified the health assets of the community and provided meaningful feedback on the unit design.

The second community meeting consisted of tenants of LUCHA's Humboldt Park Residence, which is a single room occupancy building for at-risk or formerly homeless individuals. Participants also engaged in exercises similar to those at the Logan Square community meeting, but, rather than having one large group discussion, the room was divided into three stations for the participants to move among. Care was taken to reach out to those who were hanging back and encourage their active participation. This group had less input around unit design than the Logan Square group, but did identify several health concerns.

> *At LUCHA, we were already aware of the asthma and diabetes health issues due to public data we researched and personal experiences with residents. Meeting with the focus groups brought forth many other issues we would not have identified with just research.*
>
> *Charlene Andreas, LUCHA*

In its role as meeting facilitator, IPHI drew the group out and identified issues that might have otherwise been missed. For example, LUCHA staff were relatively unaware of the prevalence of concerns about mental health issues and feelings of social isolation, having focused previously on physical diseases, such as asthma and diabetes. Because LUCHA was already committed to providing healthy housing, many of the recommendations provided by the groups (e.g., avoiding the use of

carpet; instituting a no smoking policy) had been included in the plans. Some recommendations were beyond the scope of current funding (e.g., building a climbing wall), but the Director of Building Development suggested that the findings of the focus groups might be leveraged for additional funding.

LUCHA also convened an advisory group consisting of multiple organizations and individuals involved in community health, including representatives from the University of Illinois (Chicago and Urbana-Champaign), Loyola University, Sinai Urban Health Institute, Logan Square Neighborhood Association, Saints Mary and Elizabeth Hospital, Landon Bone Baker Architects and the Chicago Asthma Consortium. Members of the advisory group provided input on what they perceived to be the most substantial health issues facing the community, reviewed the Health Action Plan, suggested additional strategies for maximizing the health of Tierra Linda residents and offered ideas for potential partnerships to support LUCHA's healthy housing strategies. By meeting with this group, LUCHA staff also learned about other local resources, such as grant opportunities and plans for a nearby farmers market. The LUCHA staff looks forward to working with this advisory group in the future.

Project Timeline

The Gantt chart below provides a visual display of the point at which LUCHA undertook the individual activities related to implementing Criterion 1.2b and the weeks in which the staff worked on those activities.

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ASSESS	Scoping conversation with public health professionals and community stakeholders.	■	■		■		■						■	■			■			■			
ASSESS	Gather evidence about the project's potential connectiosn to health and evidence regarding the baseline health of the community groups that could be impacted by the project.	■	■	■				■	■				■	■	■		■		■	■			
IDENTIFY	Identify potential actions (design/construction/operations).														■		■	■	■	■			
IDENTIFY	Prioritize potential actions and provide rationales.																■	■	■	■			
IMPLEMENT	Incorporate interventions that were identified earlier into the project plans/specifications/etc.													■	■	■							
IMPLEMENT	Develop a monitoring plan with performance metrics (design metrics, operations metrics, and health metrics) to evaluate the project's impact on resident health throughout the project life cycle. Include indicators, data sources, frequency, roles/responsibilities.																			■	■		

NOTE: The Gantt charts are not an indication of the time spent working on a task, but rather an indication that the task was worked on at some point during the identified week for an unspecified number of hours.

Mercy Housing Southeast

PROJECT TEAM:

Selena Freeman Reese, Regional Director

Tina Lowe, President

Cheryl Knight, Resident Services Manager

Vanessa Bowman, Resident Services Coordinator

Jenifer Williams, Resident Services Manager

Marie Nienhouse, Property Manager

Denise Patterson, Property Manager

PUBLIC HEALTH PARTNER:

Matt Finn, Cognitive Design LLC

Mercy is an interesting example because we have on-site service people in so many of our residences. The service people aren't developers though so they don't think about how space can affect their programs. It is interesting how this project brought two important roles together in the development process.

Tina Lowe, MHSE

COMMON SPACE DESIGN GUIDELINES	
Purpose	To provide design direction for common spaces in Low-Income Housing Tax Credit (LIHTC) senior housing properties, taking into account factors that may otherwise fall outside of consideration in typical design processes.
Key Performance Indicators	• Percentage of residents participating in resident services activities • Percentage of time common spaces are occupied • Incidence of physical and mental health conditions
Health/Social Concerns	• English illiteracy • Visual, hearing, physical and cognitive impairment
Areas of Focus	• Main entry and corridor • Multi-use rooms (large multi-use rooms and small multi-use rooms) • Outdoor space • Administrative suite
Selected Recommendations	• Group common spaces near the main entrance of the building to provide for higher utilization and to offer an iconic point of convergence for all resident activity. • Prevent falls for persons with low vision by using high-contrast flooring ONLY to indicate a change in elevation. • Accommodate reading of printed material for residents with degraded vision by providing electric lighting with peak illuminance no less than 750 lux and with a Color Rendering Index value of 85 or higher. • Locate common outdoor space in an area that receives direct sunlight at least three hours each day.

Note: In lieu of a Health Action Plan and Implementation and Monitoring Plan for the Senior Residences at Mercy Park, MHSE submitted these Common Space Design Guidelines. MHSE plans to implement these guidelines in all future senior housing projects. While MHSE did not submit the specific deliverables outlined in Criterion 1.2b, these Guidelines do embody the spirit of furthering resident health and well-being through changes to the built environment.

Organizational Commitment

As an organization, Mercy Housing has a strong commitment to the health and well-being of those who live in its properties – improving health outcomes is a part of the organization's five-year strategic plan. At a national level, Mercy has a director for health and housing to support health innovations across the regional offices. As one of its seven regional offices, MHSE shares in this commitment and is focused on implementing health initiatives that support residents through recreation, nutrition and coordinated health services. To this end, MHSE is collaborating with its partner, Mercy Care, to provide residents of Mercy Park easy access to medical, dental and adult day care services.

To date, much of the focus at MHSE has been on programming and resident services, rather than on ways in which the built environment can influence health outcomes. Participating in the pilot program broadened the Regional Director's thinking about health outcomes beyond programming and services and helped to define the role resident services staff can play early in the development process to ensure that the building's design enhances and facilitates their ability to meet resident health needs. As noted by the President of MHSE, including the resident services staff in these early discussions will "put a lot more color on our design." On the other hand, pressures to meet the requirements of a state's Qualified Allocation Plan (QAP) can overshadow any intentions a developer might have to create a thoughtful design that will enhance resident health outcomes.

MHSE took a unique approach to meeting the requirements of the pilot program. As will be discussed in more detail in the following section, rather than partnering with a public health professional, MHSE, with the help of the Enterprise staff, selected a health-focused architect to create design guidelines for common spaces that could be implemented in all future senior housing projects (summarized in the table at the beginning of this section). In developing these guidelines, the architect took note of the primary health issues facing MHSE's senior residents and created a set of design recommendations to address them. These guidelines are intended to create common spaces that are multi-functional, promote social interaction among residents and provide the flexibility to offer a broad range of programming, depending on resident and resident services' needs. The organizational commitment to incorporating these guidelines should ensure that the housing projects undertaken by MHSE will enhance resident health and well-being not only through programming and services, but also by changes in the built environment.

Partnerships

> *It is important to give developers flexibility on how to interpret Criterion 1.2b and allow them to think outside the box to address their own unique circumstances.*
>
> *Selena Reese Freeman, MHSE*

At the start of the pilot, MHSE staff shared that they were waiting for the results of a health assessment that had been conducted by a public health professional on behalf of a cooperative partner in the Mercy Park project. This health assessment was intended to identify the health services that would be beneficial to residents and increase their access to care. Consequently, MHSE staff was unsure whether they needed to form a new partnership or whether the work previously done would suffice. In addition, there was some confusion among the MHSE leadership about the expectations of the pilot program. Most of the design decisions on the Mercy Park project had been made, so the ability to influence this single project was limited. However, the MHSE President was very interested in creating a product that could be applicable to their future portfolio of senior housing developments. Many of their residents suffer from a common set of health issues (e.g., hypertension, diabetes, arthritis), as well as hearing and vision impairments. Most of the MHSE properties are built with the same amenities, which may not reflect the needs of an aging population. As such, they are often the most underutilized spaces in the building and, because they are single purpose, they are often unable to be reconfigured in ways that would offer greater value to the residents. After much discussion and support from the Enterprise and Health Impact Project staff, MHSE engaged the services of a

health-focused architect in the Atlanta area to work with staff to evaluate the way in which the common spaces are currently being used and to recommend ways in which these spaces can be improved in future developments, while meeting the requirements of the state QAP.

The architect visited three MHSE buildings, including at least one that offered resident services and one that did not. While on site, he met with a variety of staff and residents to learn about what was working and what was not and what they would like to see in terms of the common areas. He also inventoried the current types of resident services being offered by MHSE. From these efforts, the architect proposed a set of design guidelines that would move away from single-purpose rooms and instead create spaces that could easily be reconfigured to meet the types of programming offered. In addition, these common spaces would be situated to facilitate regular social interaction among residents, an important consideration in combatting the social isolation experienced by many seniors.

Data Collection and Analysis

Mercy Housing collects a substantial amount of data at the national level and has its own internal data management system. Each year, a survey is administered to every resident living in a Mercy development. Through this survey, Mercy staff can track visits to emergency departments, hospitalizations, physical activity, increased/decreased health status and physician visits. While these data are available to each of Mercy's regional offices, it was unclear to what extent MHSE has been able to use this information to evaluate the effectiveness of its programming and building design on resident health outcomes. Complementing this national data source, the Resident Services staff at MHSE reports on the type, topic and attendance rate of programming initiatives. These program data are collected on a continuous basis and directly influence the programming schedule. The Enterprise and Health Impact Project staff discussed the potential value these data collection efforts could have when designing the Implementation and Monitoring Plan for Mercy Park, and the Regional Director and President agreed to consider the relevant metrics when they develop their plan. However, because the focus of the pilot moved away from a single development to a more broadly applicable set of guidelines, the MHSE team did not complete a project-specific Health Action Plan and Implementation and Monitoring Plan.

Stakeholder Engagement

MHSE did not undertake a specific effort to engage stakeholders as a part of the development process for Mercy Park. However, the architect that MHSE partnered with during the pilot program did meet with key stakeholders, including residents, to inform the development of the recommended design guidelines.

Project Timeline

The Gantt chart below provides a visual display of the point at which MHSE undertook the individual activities related to implementing Criterion 1.2b and the weeks in which the staff worked on those activities.

	ACTIVITIES	25-Jul	1-Aug	8-Aug	15-Aug	22-Aug	29-Aug	5-Sep	12-Sep	19-Sep	26-Sep	3-Oct	10-Oct	17-Oct	24-Oct	31-Oct	7-Nov	14-Nov	21-Nov	27-Nov	5-Dec	12-Dec	19-Dec	26-Dec
ASSESS	Scoping conversation with public health professionals and community stakeholders.																						
ASSESS	Gather evidence about the project's potential connectiosn to health and evidence regarding the baseline health of the community groups that																						
IDENTIFY	Identify potential actions (design/construction/operations).																						
IDENTIFY	Prioritize potential actions and provide rationales.																						
IMPLEMENT	Incorporate interventions that were identified earlier into the project																						
IMPLEMENT	Develop a monitoring plan with performance metrics (design metrics, operations metrics, and health metrics) to evaluate the project's impact on resident health throughout the project life cycle.																						

NOTE: The Gantt charts are not an indication of the time spent working on a task, but rather an indication that the task was worked on at some point during the identified week for an unspecified number of hours.

SKA Marin

PROJECT TEAM:

Javier Garciadiego-Ruiz, Senior Project Manager, SKA Marin*

Leah Moskowitz, Planner/Project Manager, SKA Marin**

Sydelle Knepper, Principal, SKA Marin

James Knepper, Vice President, SKA Marin

Paulette Wilks, Senior Portfolio Manager, SKA Marin

Rocio Acosta, Dattner Associates

Katie Schwamb, Steven Winter Associates, Inc.

PUBLIC HEALTH PARTNER:

New York Academy of Medicine

** Joined project team roughly halfway through pilot.*
*** Left project team during first month of pilot.*

Before it was difficult to connect certain aspects to health. In our previous projects, we have focused on the quality of life for our residents and their ability to age in place. This is the first time we have focused on families and we realized we should consider the health impacts at all different stages of life. We also realized that this is something that could be measured and reflected in our future projects.

Javier Garciadiego-Ruiz, SKA Marin

SELECTED FEATURES OF THE HEALTH ACTION PLAN	
Health Concern	Strategy Adopted
Lack of Accessibility	Eight accessible units for the mobility impaired and four accessible units for the visual/hearing impaired; the remaining 140 units can be converted to accessible with minimal changes
Outdoor Crime	Install a 24-hour, building-wide, video monitoring system
Lack of Exercise, Lack of Open/Public Space, Lack of Social Cohesion	Garden facing 1st Avenue
Unhealthy Noise Levels, Sleep Deprivation, Lack of Privacy	Sound-attenuating window/wall design in all units; policy for neighbor noise complaint resolution
Lack of Exercise, Lack of Access to Jobs and Services	Bicycle storage room
Lack of Exercise, Lack of Social Cohesion, Lack of Leisure Activities	Exercise room
Lack of Leisure Activities, Lack of Social Cohesion	Indoor playroom and outdoor playground
Lack of exercise	Principal staircase open for residents' daily use; hallways are naturally illuminated and have views of outside, making them agreeable for senior residents to stroll on
Presence of Pests/Inadequate Pest Control	Integrative Pest Management
Lack of Physical Access to Health Services	Metropolitan Hospital located across the street
Lack of Access to Affordable Transportation	Bus stops within a block of the building; subway stop is planned within a block of the building
Mental Health, Lack of Social Cohesion	Music programming, featuring input from the residents, in the community room
Lack of Healthy Food	Two farmers markets nearby

Organizational Commitment

SKA Marin has a strong history of working to enhance the health of its residents by engaging with community leaders, environmental and energy consultants and architects to discuss health-promoting building features on a project-by-project basis. Many of its buildings include onsite community facilities and senior centers which offer exercise classes, nutrition workshops and access to healthcare resources. The Gilbert on First is the fourth project undertaken by SKA Marin in collaboration with the New York City Health + Hospitals Corporation (NYC H+H) and the first to focus on families. The design for the building adopted many of the health-promoting features included in other SKA Marin properties, and the Health Action Plan for The Gilbert reflects these features. Participating in the pilot program presented a unique opportunity for SKA Marin to go beyond a building's design to begin to understand how the built environment can impact resident health. To do this, SKA Marin engaged a research team that specializes in health to assist in the development of the Implementation and Monitoring Plan for The Gilbert. The SKA Marin team is looking forward to the results of putting this plan in place and expects that these documents will inform management of the current SKA Marin portfolio and the design of future buildings.

When asked whether SKA Marin would implement Criterion 1.2b in the future, the Senior Project Manager was unable to commit to doing so. He did commit to looking at the pressing health issues facing the community in which a future project was planned and determining whether the design and management of the building could positively affect the health outcomes of its residents. But he did not believe that SKA Marin would seek out a

specialist to evaluate whether the building design improved resident health outcomes as a routine part of its work.

The Senior Project Manager shared that he thought the most critical health-enhancing factor that housing assistance can provide to a household is increasing its disposable income. This extra income can be used to buy medicines, eat healthier, save for emergencies, etc. He is concerned that establishing strict health-enhancing standards will make the development process even costlier and longer than it already is and further constrain the supply of housing, which would defeat their overall goal.

Partnerships

SKA Marin came into the pilot program with a number of strong, health-related partnerships. Participating in the pilot allowed SKA Marin to leverage these existing partnerships and to create new ones specific to The Gilbert. As mentioned before, The Gilbert is SKA Marin's fourth collaboration with the NYC H+H and the third project developed next to Metropolitan Hospital. Previous projects have been developed on NYC H+H grounds and in consultation with NYC H+H public health professionals. Plans for The Gilbert were developed using this model. Thus, the plans and specs for The Gilbert were finished when the pilot began. However, many of the building's design features will address the health problems facing the East Harlem community (e.g., asthma, obesity) and include health-promoting strategies such as non-smoking and non-pet policies and adequate indoor and outdoor play and exercise space.

Given the limited ability to influence the plans for The Gilbert, SKA Marin chose to focus on the development of the Implementation and Monitoring Plan. SKA Marin engaged its existing partner, Steven Winters Associates (SWA) to provide research support and recommendations on how best to evaluate health impacts in green affordable housing. Staff from SWA reached out to health and housing professionals and compiled information about how to (1) engage residents through third-party-managed, anonymous surveys, (2) structure an operations and maintenance tool for monitoring and reporting by building management personnel, and (3) pursue programmatic interventions based on resident feedback that adapt over time in order to stay beneficial to the building population. SWA also reviewed the available health resources that focused on the East Harlem neighborhood.

SKA Marin ultimately contracted with the New York Academy of Medicine to develop and carry out the Implementation and Monitoring Plan. The Academy published the East Harlem Neighborhood Plan Health Impact Assessment in 2016, and its knowledge of the community proved to be an invaluable asset. Building off its own work, as well as the work done by SWA, the Academy was able to draft an Implementation and Monitoring Plan for The Gilbert and create and execute a plan for future evaluation.

Another important partner for SKA Marin on the project was the Metropolitan Hospital's Community Advisory Board. The Senior Project Manager shared the Health Action Plan with the Board, as well as the intention to evaluate the impact of the health-promoting strategies on resident health through the Implementation and Monitoring Plan. The Board responded positively and made no modifications to the Health Action Plan or the goals expressed by SKA Marin staff.

While SKA Marin had established health partnerships prior to joining the pilot, its newly formed partnership with the New York Academy of Medicine provided keen insights into the health of the East Harlem community and will continue to serve the residents of The Gilbert as SKA Marin moves forward in its evaluation efforts.

Data Collection and Analysis

SKA Marin also made great strides in improving its organizational capacity around data collection and analysis. Working with its various health partners and reviewing the available data (particularly the 2015 East Harlem Health Profile published by the New York City Department of Health and Mental Hygiene) broadened the staff's understanding of the health issues facing the East Harlem community. The organization now intends to collect resident health data (which they have not done before) as part of its Implementation and Monitoring Plan and to work with the New York Academy of Medicine to evaluate the information collected. Through this pilot, SKA Marin was able to overcome its concerns about the privacy restrictions around resident health data, which was an issue they identified in the baseline assessment survey. In addition, SKA Marin intends to use health data to make design decisions when planning a particular type of community, such as senior housing or permanent supportive housing. While SKA Marin will rely on an outside party to collect and analyze the survey data collected at The Gilbert, it was clear in speaking with the Senior Project Manager that he is prepared to review the existing sources of health data available for New York City when planning future projects.

> *Through participating in the pilot, I learned a lot about asthma triggers and about the health situation in East Harlem. I am sure that this process will lead to understanding how our buildings impact households.*
>
> *Javier Garciadiego-Ruiz, SKA Marin*

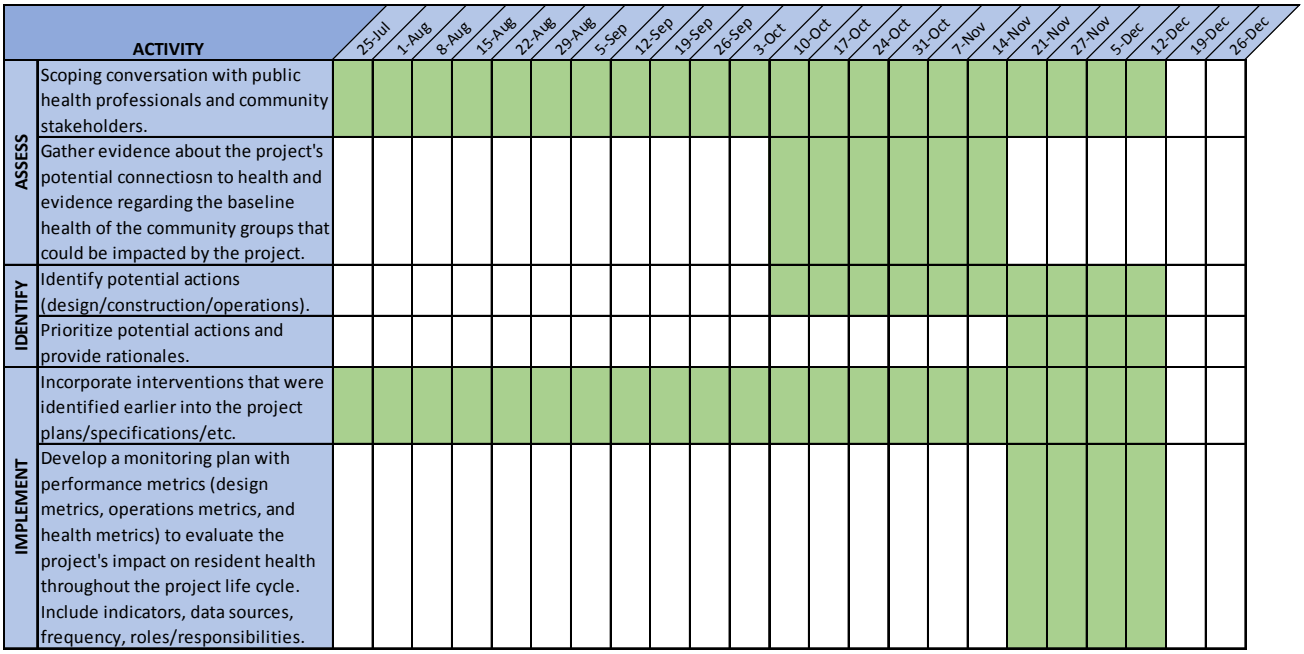
Stakeholder Engagement

Much of SKA Marin's stakeholder engagement relative to The Gilbert occurred prior to the start of the pilot program. The organization makes it a practice in the pre-development phase to meet with community leaders, local elected officials, local established institutions and public health professionals to identify and address community issues. In addition, staff meet with those organizations and community members who are most likely to be impacted by a project to ensure that all potential stakeholders have the opportunity to provide feedback.

During the pilot program, SKA Marin staff reached out to several stakeholders as they worked through the development of the Health Action Plan and Implementation and Monitoring Plan for The Gilbert. Much of this activity was described in the Partnership section above.

Project Timeline

The Gantt chart below provides a visual display of the point at which SKA Marin undertook the individual activities related to implementing Criterion 1.2b and the weeks in which the staff worked on those activities.



NOTE: The Gantt charts are not an indication of the time spent working on a task, but rather an indication that the task was worked on at some point during the identified week for an unspecified number of hours.

Results

The experiences of the five CDCs participating in the pilot program provided a candid look at the process by which affordable housing developers will implement Criterion 1.2b, should they choose to do so. Each organization took a different approach to the key implementation steps, and all but one successfully created a Health Action Plan as outlined in the criterion. The Implementation and Monitoring Plan proved a bit more problematic for several groups, in part because of their lack of experience in monitoring resident outcomes related to building design. Despite these challenges, four of the five developers either had fully developed monitoring plans or had the basics of a plan that could be solidified once final design decisions were made. Thus, Enterprise believes that the products developed by these four developers would ultimately be sufficient to gain the full points available in the Green Communities certification process. MHSE, while developing a useful product for future projects, did not complete a Health Action Plan and Implementation and Monitoring Plan sufficient to qualify under the certification criteria. Appendix C includes the final deliverables for each of the cohort members.

The remainder of this section is organized around the research questions that guided the evaluation of the pilot project. The findings to these questions informed Enterprise's understanding of how Criterion 1.2b will be implemented in the field. Information summarized under each question was drawn from responses to the pre- and post-pilot surveys, as well as experiences shared in the Community of Practice calls, individual one-on-one calls and the exit interviews. In addition, Enterprise asked that each developer identify the costs (both time and money) and complete a Gantt chart summarizing when they worked on each step of the criterion (included as part of the organization's case study in the previous section).

How did the developers identify and use existing local health data and resources? What evidence informed the creation of their Health Action Plans?

In all but one case, the public health professionals reviewed and interpreted public health data for the developers. The public health professionals were often able to obtain published data at a level that encompassed the neighborhood in which the development would be located. Two developers sought community feedback to ground truth and these data and to prioritize the health issues identified. Understanding local data and engaging the community were essential to the process of creating the Health Action Plan.

Most of the groups relied on their public health professional to identify and interpret local health data. However, going forward, at least two groups indicated that they would likely access these data themselves now that they are more aware of available sources. One group indicated that the public health data were the most useful in informing site decisions, while two groups emphasized the value of using stakeholder input to augment and clarify the data reported. One data source that at least two developers had access to, but did not use, was responses to annual resident surveys. Participating in the pilot heightened the developers' awareness of these data and their potential to inform future building design and programming decisions.

Because some of the projects were further along in the development process than expected, the public health data were often used to support design decisions that were included in the plans rather than highlighting new ones. Ideally, a review of the public health data, supplemented by community input, would inform building design. However, even when decisions had already been made, the process of understanding the health data helped the cohort members more concretely realize the connection between the built environment and health outcomes, suggested potential metrics to include in the Implementation and Monitoring Plan, and will inform the design of future projects. In addition, a review of the public health data suggested the need for particular types of programming or partnerships with nearby service providers, which the developers felt was another positive outcome of the pilot.

Two developers noted that the knowledge they gained about the availability of public health data and its relevance to their decision making will bolster their approach to implementing mandatory Criterion 1.2a and enrich their future designs.

Did the developers partner with local health providers and public health professionals? If so, how? If not, why not?

Each developer team did partner with a public health professional; in one case, this individual was a health-focused architect rather than a local health provider or health professional. The process of locating a public health professional and negotiating a scope of work for implementing Criterion 1.2b took time, and several developers recommended that this task should occur as early as possible to ensure an impact on design. All developers indicated that they would continue the partnerships forged during the pilot program.

As summarized below, all but one of the groups partnered with a local public health professional, and several consulted multiple health partners:

- Grant HEDC chose a consultant who had completed a city health plan and had documented the health challenges facing the community. In addition, staff reached out to Kaiser Permanente and other local health providers for additional insights on the health of Watts residents.
- Gulf Coast Housing Partnership had a prior relationship with the public health professional, who had some housing background in addition to public health experience.
- LUCHA interviewed a number of potential consultants and selected one that was local to Chicago, had experience with completing a health impact assessment and had some housing background. During the process of identifying a public health professional, LUCHA realized how strong an interest there was in the goals of the pilot and convened a health advisory council to provide additional expertise and feedback.
- Mercy Housing Southeast chose not to partner with a public health professional, but instead partnered with a health-focused architect to provide design guidelines that could be applied to future development projects. Enterprise staff connected MHSE with this resource.
- SKA Marin's relationship with the NYC H+H Corporation led staff to the New York Academy of Medicine who had recently completed a health impact assessment of the East Harlem.

All groups expressed appreciation for this partnership and believed that it would continue in the future. While the public health professionals helped to develop the Health Action Plans, all of the cohort members felt their greater contribution was in the identification of the health metrics to be included in the Implementation and Monitoring Plan. This latter task was one that none of the developers felt able to perform in the future without the assistance of a public health professional. One cohort member noted that the requirement to engage with a public health professional could be off-putting for some developers and suggested that Enterprise consider expanding the definition of "public health professional" to include other health-focused professionals who have experience with an integrative design process that considers resident health outcomes.

One unexpected finding was the length of time it took for most of the groups to identify and negotiate a scope of work with a local public health professional. With limited, if any, experience in locating this type of expertise, some cohort members went through an intensive screening process before selecting their consultant. Even for those who identified a public health professional early on, the experience of developing and agreeing to a scope of work was more involved than anticipated. It is important to recognize that the scope of work required for implementing Criterion 1.2b is unique; even consultants with expertise in conducting health impact assessments will need to spend time understanding the particular requirements of the Green Communities criterion.

Groups that partnered with a public health professional who had experience in completing a health impact assessment had to narrow their public health professionals' initial scopes of work substantially. In these cases, the public health professionals initially assumed that they would be required to complete a health impact assessment (which is more labor intensive and costly than the health action plan required by Criterion 1.2b). After discussion and direction by the housing developers, the public health professionals were able to provide a targeted scope of work specifically for the process and products described in Criterion 1.2b.

Did the developers engage community stakeholders? If so, how? Who were the most relevant voices at the table? If they did not engage community stakeholders, why not?

Three of the five developer teams met with community stakeholders, including residents, service providers, and health experts, during the pilot program. The others had either engaged with stakeholders prior to pilot program or had a scheduled event delayed beyond the timeframe of the pilot program. Those that were successful in engaging community stakeholders found value in the experience and recommended that it be a mandatory part of the process.

Three of the organizations successfully engaged community stakeholders, including residents, during the pilot program. Staff from one organization engaged stakeholders prior to the pilot program as part of their early planning process. The fifth organization was unable to engage stakeholders because staff had planned to coordinate their engagement efforts with a previously scheduled community event, which was delayed beyond the timeframe of the pilot project. This experience suggests the importance of creating an opportunity for community engagement that is within the developer's control or adopting a strategy that includes multiple avenues for stakeholder engagement. All of the groups felt that community engagement had enriched and enlivened their final products because of the real-world experiences shared by those with whom they met.

How did the developers staff this activity and delegate the roles and responsibilities required?

The lead staff person for the pilot program varied among the developer teams and included an executive director, project manager, and regional director. The responsibility for drafting the Health Action Plan and Implementation and Monitoring Plan fell to the public health professional engaged by the developer team.

The lead staff person performing the roles and responsibilities for this project varied among groups. For two developers, the lead staff person for the pilot was the project manager. For one developer, the responsibility was shared between the Project Manager and the Executive Director; for another, the Director for Building Development spearheaded the effort, with support from the Executive Director. And, in yet another case, the Regional Director led the project. Most of the developers relied on their public health partners to draft the Health Action Plan and Monitoring and Implementation Plan, but all seemed to be heavily invested in the process and to learn from it. Based on their experiences, it appears that most would feel capable of drafting a Health Action Plan in the future, but would still turn to a public health professional to develop the Implementation and Monitoring Plan.

What amount of resources did the developers use?

Total costs incurred by the organizations ranged from $10,000 to $15,000; the costs associated with partnering with a public health professional ranged from $5,100 to $9,500.

All of the groups strongly stated that they would not have been able to implement Criterion 1.2b without the $10,000 grant provided by Enterprise. Most groups used all or part of their grant to support the public health professional. Other costs incurred represented staff time. (One group used a small portion of the grant to buy

refreshments for two community meetings.) Total costs incurred ranged from $10,000 to $15,000, with those groups exceeding the grant amount contributing the necessary staff costs.

Consultant costs ranged from a low of $5,100 to a high of $9,562. The scopes of work for each consultant were similar, with emphasis placed on data collection and analysis and development of the Health Action Plan and Implementation and Monitoring Plans. The groups also used their public health consultants to lead their community engagement efforts.

The time spent on each part of Criterion 1.2b also varied, ranging from 50 to 69.5 staff hours to complete the Health Action Plan. Staff time committed to the creation of the Implementation and Monitoring Plan ranged from 20 to 95.5 staff hours. Total staff hours invested by the developer teams ranged from 89.5 to 164 hours, or between 2 and 4 weeks over a five-month period.

The approach the developer teams took to completing the various tasks required by Criterion 1.2b varied. A review of the Gantt charts included in the previous case studies reflects these differences. In one case, the developer team approached each task linearly – completing one task before moving to the next. The other four teams worked on tasks simultaneously, with work on a particular task spanning multiple weeks. One group did not work on the criterion deliverables for a period of several weeks while securing a new funding source, while the other groups worked consistently throughout the period of the pilot. The variation between the five groups likely has as much to do with each developer's own housing design/development process as it does the time required to comply with Criterion 1.2b. The intent of Criterion 1.2b is to integrate health expertise into the design/development process, which is managed for the project at large.

How reliant were the developers on the technical assistance provided? Was the right type of expertise provided (i.e., public health professionals) or would they have benefitted from additional expertise? Was the provision of technical assistance crucial to the successful implementation of the criterion?

All of the cohort members benefitted from the technical assistance provided. They found the partnership with a public health professional to be critical to their ability to complete the deliverables required by Criterion 1.2b. Several organizations mentioned the importance of partnering with a public health professional who had some background in housing.

All of the groups valued the technical assistance offered by the Enterprise/Health Impact Project team. Much of the assistance was provided during the Community of Practice calls as the Enterprise/Health Impact Project team clarified expectations and helped the cohort members address any challenges they encountered. The individual check-in calls also provided an opportunity for the Enterprise/Health Impact Project team to gain an in-depth understanding of the status of the development projects and to address the individual needs of the developer teams. In addition to these scheduled interactions, Enterprise staff also provided ad-hoc technical assistance to one group to help them narrow the selection of a public health professional and to another to help align the goals of the pilot program with a redirection in project focus.

As mentioned earlier, most of the groups valued the expertise of their public health partner. One group questioned whether it was necessary to partner with a public health professional, particularly if the partner selected lacked housing experience. Another group echoed the importance of selecting a public health professional with a housing background, and a third group chose not to use a public health professional at all, but partnered with a health-focused architect instead. This was a successful engagement, but required the Enterprise staff to locate the right type of architect for the developer. It is unlikely that the developer could have located this resource without the assistance of the Enterprise staff.

What was the value of the monthly Community of Practice calls and engagement?

The Community of Practice calls provided an opportunity for the cohort members to share their progress and to learn from one another. They also provided a forum for the Enterprise/Health Impact Project team to discuss information relevant to the entire cohort.

The Community of Practice calls were well attended and provided an opportunity for the cohort members to share their experiences. The amount of interaction between group members was less than expected. Most of the calls consisted of each group reporting out and the Enterprise/Health Impact Project team discussing a topic of interest to the group. Each call was held to an hour, so perhaps a longer call would have elicited more group discussion. Cohort members did share drafts of plans with one another, and one participant suggested that it would have been useful to have a list of the public health professionals that each group engaged and a brief description of their backgrounds.

From the perspective of the Enterprise/Health Impact Project team, these monthly calls helped to identify groups that were having trouble overcoming a particular challenge and cued the team to reach out for more direct technical assistance. The individual calls with each organization were more useful for the purposes of data collection since they offered the ability to probe topics more deeply and ask follow up questions more readily.

What was the value of the kick-off meeting?

The kick-off meeting served to establish a common understanding of the pilot program and its goals and enabled the participants to meet one another and the members of the Enterprise/Health Impact Project team.

The kick-off meeting oriented participants to the project, the project team, the other cohort members and the requirements of Criterion 1.2b. When asked to rank the importance of the various aspects of the pilot program, most of the cohort members ranked the kick-off meeting as least important to the successful completion of the pilot. One possible reason for this is that, relative to the other aspects of the pilot program, the kick-off meeting had a relatively small role in readying the cohort members to implement Criterion 1.2b. One developer, however, thought it was the most important aspect, citing the knowledge that he gained about Enterprise's Green Communities initiative and the actions being taken to promote resident and community health across the affordable housing sector. He was excited to learn that what he was doing locally was being amplified by others throughout the country.

What factors in the process most influenced decision making?

Two factors were most important in influencing decision making – working with a public health professional and engaging community stakeholders.

Groups were split on this question. Three groups considered engaging with a public health professional to be most influential, while two others cited community engagement. Those that cited community engagement as most important did so because it added context to and promoted greater understanding of the public health data. In some cases, the priorities identified in the data were not necessarily the health priorities of the community, which was a key lesson learned. Those that believed the public health professional was most influential in their decision making were grateful for the array of public health data evaluated and the strategies suggested improving health outcomes.

What did the developers perceive to be the primary value gained through implementing Optional Criterion 1.2b?

The developers learned about the health issues facing their communities and deepened their understanding of how the built environment can impact these issues.

Based on the final survey results and their exit interviews, all of the cohort members gained a tremendous amount of knowledge and experience as a result of implementing Criterion 1.2b. The groups were unique in what they found to be most valuable. One group learned that hiring a consultant who did not have any design background could add value to the project; thus, they were more likely to partner with such an individual in the future. This same group discovered that they were not the only developer thinking about the intersection of health and housing and noted that the body of resources available from the public health community that were targeted to housing developers was growing. Three teams gained a greater understanding of the health challenges facing the residents of the community in which they are building, and two emphasized the importance of engaging community stakeholders to uncover health issues that were not fully captured by published data sources. The fifth group enhanced its understanding of how the built environment can impact health outcomes.

In all cases, the participants in the pilot gained a greater understanding of the health issues facing the low-income communities they aim to serve and how their design decisions can positively or negatively impact the health outcomes of their residents. All groups committed to thinking more about health in the design of future projects.

Do the developers anticipate implementing Criterion 1.2b on future projects?

None of the developers could commit to implementing Criterion 1.2b again, however they all recognized the importance of considering health data when designing a building. Resource constraints was the most common barrier cited to future implementation.

While none of the participants could not commit to creating a Health Action Plan and Implementation and Monitoring Plan for future projects, they all agreed that considering health data was a valuable addition to the pre-development process. Among the groups that were unable to commit, the reasons cited varied. Several groups were concerned about having the resources necessary to hire a public health professional and to implement continued monitoring. Another group noted that they would be more likely to pursue less resource-intensive optional criteria to gain the points necessary for Green Communities certification.

However, all groups expressed that they were likely or very likely to consider public health data in future decision making. In addition, because some of the projects were too far along to make substantial design decisions, all developers agreed that considering public health data and engaging stakeholders around health issues should be done very early in the process to ensure that the outcomes of these efforts can be reflected in the ultimate project design.

Advice to Enterprise and Future Developers

As part of their exit interviews, we also asked each group to make suggestions on how the Enterprise/Health Impact Project team can facilitate the adoption of Criterion 1.2b by a broad group of affordable housing developers. The following is a summary of the suggestions made by the cohort members:

To ensure adoption of Criterion 1.2b, Enterprise should seek to:

- ✓ Create additional tools
- ✓ Consider changes to the criterion
- ✓ Drive systems change

1. Create Additional Tools

    - Create a database of potential interventions that have been implemented successfully in similar projects.
    - Create a list of health professionals with experience in housing and health.
    - Create a toolkit of exercises that developers can use to engage community stakeholders, particularly residents, around health issues.
    - Create a reference library of Health Action Plans and Implementation and Monitoring Plans for developers to use as guidance in preparing their own plans.

2. Consider Changes to the Criterion

    - Broaden the focus of Criterion 1.2b to include programming and consider giving points for implementing changes to the built environment, as well as programmatic strategies.
    - Provide more flexibility and allow developers to pursue solutions that are most relevant to their particular organization and their residents.
    - Make it clear that developers do not have to partner with an academic health expert. In some cases, partnering with a builder who has a health background could be adequate and less expensive.
    - Be more specific about the scope and scale of the deliverables required by Criterion 1.2b, particularly the Implementation and Monitoring Plan (i.e., focus on the most important health outcomes, include the health metrics that can easily be monitored).

3. Drive Systems Change

    - Work at the state and local levels to embed health considerations in the regulatory framework governing affordable housing (e.g., QAPs) and to allow greater flexibility in space utilization.

Conclusions

CONCLUSION: Participating in the pilot broadened the developers' understanding of the relationship between health and the built environment.

While most cohort members indicated that they valued the connection between health and the built environment in the baseline assessment survey, the experience of participating in the pilot program both broadened and deepened their understanding on how impactful the design of a building can be on resident health outcomes. To these groups, "health" came to mean much more than just the avoidance or management of disease and began to encompass issues such as safety and social isolation.

> *"As developers, we are not service providers so we don't think about what kind of a room could be best for delivering services or how a space can welcome people. Before this pilot, we didn't realize that place and design can intersect to increase the health and wellness of our residents." (Mercy Housing Southeast)*

> *"Our idea of health became a little more focused. We started looking at how you can create the type of community where people feel safe or that exercise can become part of everyday life. But, by participating in the pilot that thought became more concrete. We were able to focus on the actual dangers on the property that we could take care of." (Gulf Coast Housing Partnership)*

CONCLUSION: Community engagement is an essential part of the process and revealed unexpected insights.

Although not all cohort members were able to engage with key stakeholders during the period of the pilot program, those that did found the experience to be vital to their efforts to draft a meaningful Health Action Plan. Listening to community needs and priorities raised health concerns that were not well captured by the available public health data and provided an opportunity to ground truth the published data with community perceptions of a healthy neighborhood.

> *"The community members provided a lot of input on mental health issues, perspectives on safety issues and knowledge of who in the community was providing health assets. The residents are the experts on what they're experiencing." (LUCHA)*

> *"Community engagement was the most valuable part of the process. We learned the most by listening to the perspectives of people in the community. However, it is important to engage in these conversations in a sensitive way to give some thought to trust building in advance." (Gulf Coast Housing Partnership)*

CONCLUSION: Partnering with a public health professional is important, but it takes time to find the right fit.

All of the groups indicated that the partnership they established had met their expectations and was a valuable resource. The majority of groups thought they were likely to engage a public health professional in the future, but emphasized the need to start the process early to allow sufficient time to identify a consultant and negotiate a scope of work. The cohort members relied on their consultants to identify health priorities in the community, select health metrics for the Implementation and Monitoring Plan, and facilitate community stakeholder meetings. In addition, the public health professionals drafted the Health Action Plans and Implementation and Monitoring Plans for their development partners.

"Our organization realized that we needed somebody who knew more about health, so we reached out the NY Academy of Medicine who had just released a report about the health of the community in East Harlem. They were happy to work with us." (SKA Marin)

"Some groups may have gotten bogged down in hiring the public health professional that knew the most about doing a Health Action Plan. I think it's more important to find someone who can meet you where you are. The selection of an academic expert in health impact was not exactly what the project needed, so you may need to broaden what you are looking for in terms of a health background." (Gulf Coast Housing Partnership)

CONCLUSION: Health data can inform design decisions and should be considered early in the process.

While a number of affordable housing developers include health-promoting design features in their buildings, these decisions are often made without regard to the specific needs of a building's residents. Criterion 1.2b focuses this decision making on those features that may have the greatest impact on health by requiring a review of the available public health data and engagement with community stakeholders to surface any health priorities that may not have been reflected in the data. All of the cohort members noted the value of considering the health needs specific to their communities. For some, the data and community feedback reinforced design decisions already made; for others, the information learned drove additional health-promoting design decisions.

"We will use health data to make design decisions when planning for a particular types of community, such as senior housing or permanent supporting housing." (SKA Marin)

"One of the most valuable parts of the process in terms of making design decisions was the tenants, community members are experts in what they are experiencing." (LUCHA)

One common theme expressed by the cohort members was the need for discussions about the health needs of the community to occur early in the pre-development process so that building plans can fully reflect the strategies selected to address them.

"I believe this process needs to start early in the design process, if not before. LUCHA was fortunate to have staff and architects who already had an interest in healthy housing and knew some of the issues and strategies, which was reflected in our drawings." (LUCHA)

CONCLUSION: No group committed to implementing Criterion 1.2b in the future, although each had different reasons for being unable to do so.

All of the cohort members were reluctant to commit to implementing Criterion 1.2b in future projects and two potential barriers to implementation were identified – the need to engage a public health professional and the requirement to develop an Implementation and Monitoring plan. However, in listening to the developers' experience in the pilot program, it is clear that they will carry some elements of the Criterion 1.2b into their future work—particularly community and stakeholder engagement and the use of public health data to identify health priorities.

"We have not fully vetted an implementation plan, however the identified elements are appealing and will be included in the design if feasible." (Grant HEDC)

"Whether we implement Criterion 1.2b on new projects will depend on a lot of different factors, funding being a very significant one. The grant made a very big difference—we would not have taken the time to develop a Health Action Plan without it." (Mercy Housing)

"We will definitely identify pressing health issues to see if the design and management of our building can positively affect them. But seeking out a specialist to perform a study on how well it works probably won't become part of the routine." (SKA Marin)

"We would definitely like to implement Criterion 1.2b again, but it does come down to capacity." (LUCHA)

"The only reason I wouldn't do it again is because we aren't usually struggling for optional points and something like this that requires a fair amount of documentation is a lot harder than implementing a non-smoking policy, for example." (Gulf Coast Housing Partnership)

CONCLUSION: Development of the Monitoring and Implementation Plan and the need for continued monitoring posed the greatest challenge for the pilot program participants.

All cohort members expressed concern about the need to develop a Monitoring and Implementation Plan, as well as the need to conduct long-term monitoring. Several issues were raised by the developer teams—the long-term commitment of staff and resources to conduct the monitoring; the difficulties in selecting metrics and creating a strategy for collecting and analyzing those metrics; and the purpose of developing a Monitoring and Implementation Plan so far in advance of construction and lease up. Part of the uncertainty around this requirement of Optional Criterion 1.2b is that few developers have formally evaluated the impact of their housing on residents. Thus, developers have little context or practical experience with health monitoring. Despite their concerns, four of the groups developed a Monitoring and Implementation Plan, and several indicated that they would rely on an annual resident survey to provide the data necessary to determine long-term impact.

"The timing was not the most favorable. The plans and specs of the building are already finished…On the other hand, the building will be ready in 2019, so engaging in conversations about is management feels premature." (SKA Marin)

"How can we give ourselves some indication down the road of how this went? Thinking about design impacts has an implication for monitoring—how can we get a sense that what we did had a meaningful impact, particularly as we think about what to include in future projects." (Gulf Coast Housing Partnership)

CONCLUSION: To ensure success, implementing the criterion should be a seamless addition to the typical development process, rather than another requirement.

In observing the cohort members, it was clear that the process of designing and building affordable housing can be unpredictable and challenging. Implementing Criterion 1.2b became one more priority on a long list of priorities for the development teams. Embedding the requirements of the criterion into the development process and ensuring that developers start thinking about health early in that process may be key to scaling its adoption across the industry.

"Success is tied to the development cycle of particular projects. This effort must be institutionalized or part of the organization's mission so that this process is part of all projects from the beginning." (Grant HEDC)

"Providing affordable housing is already very complicated and expensive. Adding another layer makes the process even lengthier and more costly. That could result in less affordable housing. Not having housing for low-income families is the worst health impact—worse than not considering health outcomes in low-income housing." (SKA Marin)

Next Steps

The pilot program provided Enterprise and the Health Impact Project with valuable findings on how partners implement Optional Criterion 1.2b. The next steps listed here are designed to operationalize the findings of this pilot program into additional tools and technical assistance, potential changes to the criterion, and methods for facilitating widespread adoption of the health action plan process across the affordable housing industry.

Technical Assistance

Tools and templates that would accelerate adoption of the practices included in Criterion 1.2b include:

1. Further assistance for affordable housing developers in identifying a public health professional with the necessary qualifications for a productive partnership. This may include a list of qualified public health professionals, innovative partnership ideas such as working with local hospitals or health departments, and providing recommendations on the qualifications of a public health professional to narrow the search. To further facilitate the partnership, draft scopes of work may also be developed to assist developers as they seek to engage a public health professional.
2. Throughout the process of implementing Criterion 1.2b, the development teams were faced with integrating each step of the criterion within their design and development processes. During the pilot program, the pace of development changed more quickly than the implementation schedule of the criterion. More guidance and suggestions would be helpful that display potential schedules of implementing the criterion as compared with phases of development.
3. Enterprise will be adjusting the reporting templates associated with Criterion 1.2b in response to suggestions gathered during the pilot program, in order to make these documents more user-friendly.
4. Creation of a list of potential performance metrics to use when measuring the health impacts of design changes. This work would provide samples of design, operations, and health metrics for inclusion in a team's Implementation and Monitoring plan. These metrics will be associated with the resident health campaigns identified in Criterion 1.2a and include recommendations as to how often the metrics should be evaluated and sample monitoring methods. Development teams would be able to select metrics, and monitoring strategies, from this list that are most relevant to their project.

Criterion Changes

All of the teams participating in the pilot program provided thoughtful feedback on the requirements of the criterion and the areas they considered to be most valuable, as well as those that they considered to present the greatest challenge. Enterprise will utilize this feedback to determine whether changes should be made to the criterion in the next release of the Enterprise Green Communities Criterion, expected 2019-2010. In the interim, Enterprise will consider adopting the criterion to consider programming as well as built environment modifications.

Health Action Plan Adoption in Design

The need for the widespread adoption of health as a design consideration in affordable housing was reiterated through the findings of this pilot program. Even for developers not pursuing Enterprise Green Communities Certification or implementing Optional Criterion 1.2b, the process of performing a health action plan is an effective method of ascertaining how the health needs of residents can be addressed through a project's design and development practices. And, the methods and templates provided by Enterprise through Criterion 1.2b serve as a viable framework for developers to do this. Suggested ways to encourage the adoption of the Health Action Plan process in affordable housing design in a systemic way include:

1. Disseminating the results of this pilot program throughout the affordable housing and public health fields.
2. Providing a toolkit for developers to use when creating a Health Action Plan and Implementation and Monitoring plan.
3. Supporting additional pilot engagements of Criterion 1.2b that span the design/development lifecycle of an affordable housing project rather than a compressed 6-month time period.
4. Providing competitive funding to support affordable housing developers with community engagement efforts and/or with partnerships with public health partners, in order to catalyze the creation and implementation of a Health Action Plan.
5. Convening affordable housing design and development teams with public health practitioners in order to raise awareness of partnership opportunities.
6. Finding additional ways to incentivize developers to utilize a Health Action Plan through avenues such as state QAPs, facilitating partnerships, or additional research into the impact on residents.

Enterprise, in partnership with other stakeholders, will implement these next steps based on funding availability and continued evaluation of groups implementing Criterion 1.2b.

Appendix A: Request for Proposal

2016 REQUEST FOR PROPOSALS

Health Action Plan Pilot Grant Program: Integrating HIA-Inspired Criteria into Affordable Housing Development

Released: June 8, 2016

Responses Due: June 22, 2016

I. PROJECT BACKGROUND

With the release of the 2015 Enterprise Green Communities Criteria (the "2015 Criteria"), affordable housing development teams are encouraged to integrate an intentional approach to improving resident health outcomes through their design and development processes. Criterion 1.2b, *Resident Health and Well Being: Health Action Plan*, defines a process by which architects, designers, and developers can consider the connections between the design, construction and operation of buildings and public health.

Criterion 1.2b (included in full as an Appendix to this RFP) calls for the developer, at the pre-design phase of development and continuing throughout the project life cycle, to collaborate with public health professionals and community stakeholders to assess, identify, implement and monitor achievable actions to enhance health-promoting features of the project and to minimize features that could present risks to health. Compliance with this criterion requires partnership with public health professionals. Specifically, developers:

- Create a Health Action Plan. Using public health data and community input, the Health Action Plan will characterize how the project may impact social, environmental and economic outcomes for residents and, in turn, promote health or produce unintended negative consequences for resident health.

- Then, develop an implementation and monitoring plan that includes a summary of modifications made to the project in response to the Health Action Plan, performance metrics, and specific information on monitoring indicators. This plan will enable the developer to evaluate the project's impact on resident health throughout the project life cycle.

Enterprise is interested in conducting a pilot project to observe and support the process by which a limited number of community development corporations (CDCs) implement Criterion 1.2b of the 2015 Criteria. We intend to identify five CDCs located in different regions of the United States who are at the pre-design stage of their projects, and we will follow and support these developers as they go through the process of creating a Health Action Plan and developing a project implementation and monitoring plan. Both the construction of new affordable housing and the rehabilitation of existing buildings are eligible to participate in this pilot, and we intend to select a mix of project types.

The purpose of this pilot project is to observe and support the process through which CDCs evaluate public health data and forge the key partnerships necessary to create a Health Action Plan. This knowledge will inform future efforts by Enterprise to develop tools and resources that will assist developers in implementing the health components of the 2015 Criteria. The participating CDCs will immediately benefit from technical and financial support as they engage in the design and development process. Awardees will have ready access to technical assistance from national experts, funds to support the hire of a local public health professional, and access to a peer network from which to learn. These organizations will benefit from deep technical support on one particular project, which they will then be able to apply to future projects. And, each participating organization will have the ability to inform the future direction of partnerships between public health and housing organizations.

II. SCOPE

Enterprise Green Communities requests submissions of proposals from affordable housing organizations interested in engaging in the process outlined in Criterion 1.2b*: Resident Health and Well Being: Health Action Plan*. Applicants must identify a housing project that is viable and in the pre-design stage, such that the process described in Criterion 1.2b will be carried out primarily in Q3 and Q4 of 2016.

Awardees will receive a $10,000 grant to support the involvement of a public health professional on their project, will receive travel reimbursement for the July Kickoff Workshop (see below), will receive ongoing technical support in regards to implementing Criterion 1.2b, and will have the opportunity to engage in a peer network.

By the end of this project (the end of 2016), each awardee will be better positioned to integrate health-promoting features into their development projects, have forged partnerships with the health community, and be positioned as a leader in bridging the fields of health and housing.

Awardees will be expected to:

- Implement the process outlined in Criterion 1.2b, including collaboration with the community and a local public health professional, on a particular project.
- Track and share the time and costs of implementing the criterion, as well as any obstacles or challenges encountered.
- Participate in a Kickoff Meeting in Washington, DC (likely July 29, although specific date will be selected pending project team selections).
- Participate in data collection efforts including short surveys, individual interviews, and monthly Community of Practice calls throughout 2016. Through these efforts, awardees will share their organization's qualitative perspective of the value, pain points, and successes in implementing Criterion 1.2b and in the role of the technical assistance provided through this project. Ultimately, awardees will share what is needed in order for their organization to implement the Criterion 1.2b process successfully on future projects.

III. SUBMISSION REQUIREMENTS

Applicants should submit a response to this RFP that describes their organization's commitment and capacity to implementing Criterion 1.2b in a project during the second half of 2016.

The full application should not exceed four pages in length, and applicants must address each of the following areas in the order in which they are set forth below:

Applicant Information

A. Organization information
    - Organization name
    - Mailing address
    - Contact name
    - Contact phone number
    - Contact email address
B. Describe your organization's prior experience with affordable housing development.

C. Describe your organization's commitment to addressing resident health through housing, including any preexisting partnerships with public health organizations or professionals (Note that the lack of prior partnerships will not preclude an organization from award selection).
D. Describe how your organization will approach the expectations listed in the Scope section above, if selected. Also include whether or not a key representative from your organization would be able to attend the Kickoff Workshop on July 29 in Washington, D.C. (Note that while availability for a full-day meeting on July 29 is preferred, lack of availability for this date will not preclude an organization from award selection).

Project Information

A. Location of project identified for implementation of Criterion 1.2b.
B. Brief description of project including whether it is new construction or a rehab of an existing building; construction type; number of housing units; and target resident population.
C. Brief description of design and development timeline of project, clearly indicating how implementation of Criterion 1.2b would be feasible during Q3 and Q4 of 2016.

IV. EVALUATION CRITERIA

Complete and timely proposals will be evaluated based on the following criteria:

A. Development project schedule.
B. The thoroughness and comprehensive nature of the proposal.
C. Applicant's demonstrated experience in developing affordable housing.
D. Applicant's commitment to addressing resident health outcomes through housing solutions.
E. If presented with otherwise equal applicants, Enterprise will select organizations to participate in this project that represent a variety of project locations and construction types.

V. INTELLECTUAL PROPERTY

Any materials produced pursuant to a scope of work or contract will be the property of Enterprise.

VI. CONTRACT FOR SERVICES

This work will be conducted under the terms of Enterprise's standard contract for services. A standard contract agreement will be provided to the selected respondent(s).

VIII. SUBMISSION INFORMATION

Responses to this RFP must be submitted electronically by 11:59pm ET on **June 22, 2016** with *Health Action Plan Pilot RFP – Organization Name* as the subject heading to greencommunities@enterprisecommunity.org Responses submitted by other means (e.g. US Mail) or after the deadline will not be considered. Questions should be submitted to Krista Egger, kegger@enterprisecommunity.org.

All applicants will be notified by Green Communities of the award decisions no later than July 5, 2016.

1.2b *Optional | 12 points*
Resident Health and Well-Being: Health Action Plan

REQUIREMENTS

At pre-design and continuing throughout the project life cycle (design, construction, operations), collaborate with public health professionals and community stakeholders to assess, identify, implement and monitor achievable actions to enhance health-promoting features of the project and minimize features that could present risks to health. As compared to satisfying the requirements of Criterion 1.2a, compliance with this criterion requires a more rigorous association with public health professionals and more robust follow-up actions. Specifically, comply with Step 1 and Step 2 outlined here:

Step 1: Create a Health Action Plan

Purpose

Conduct additional research on resident health factors identified in 1.2a. Using public health data and community input, characterize how the project may impact—both positively and negatively—social, environmental and economic outcomes for residents and, in turn, promote or produce unintended negative consequences for health. Based on the best available evidence, prioritize actions that will protect and promote health in response to these potential social, environmental and economic impacts.

Participants

The primary participants are those on the project team, which will be guided by input from community stakeholders likely to be affected by the project, as well as technical assistance from public health professionals (ideally those with Health Impact Assessment [HIA] expertise). As described in Criterion 1.2a, community stakeholders may include community members who live in or may be served directly by the project; individuals who live, work or learn in the neighborhood surrounding the project; and those who provide services or programming in the building or in the neighborhood surrounding the project. Public health professionals may include those with expertise in public health or community health. Faculty or graduate students of public health programs, and staff of local health departments, public health institutes and/or community-based public health organizations are suggested examples of partners. See Resources for more suggested contacts.

Process

Gather information and solicit feedback regarding critical health aspects affecting the community (including social, environmental and economic factors that impact health). Hold a series of meetings with key stakeholders, including public health professionals and community stakeholders to facilitate collaboration and develop a plan for analyzing the project's potential impacts on health, including:

- Conduct a scoping conversation with public health professionals and community stakeholders to identify the project's potential connections to health. Prior to this scoping conversation, project teams could review and familiarize themselves with the connections between building design, construction and operation; neighborhood characteristics; and health. See the Resources section in Criterion 1.2.a for information about these connections to health.

- Gather evidence (including existing data sources, new qualitative research and/or public hearings, meetings with public health professionals) about the project's potential connections to health and the baseline health of the community groups that could be impacted by the project.
- Outline the distribution of health issues among impacted communities and describe how different groups may be disproportionately impacted by the project (positively and negatively).
- Identify actions that could be taken to enhance health-supportive features of the project and those that could minimize potential health risks. Identify actions that can be taken within the project's design, construction or operation that will promote health equity. As listed in Resources, Promoting Equity Through the Practice of Health Impact Assessment can provide guidance.
- Using the list of actions produced, prioritize actions to protect and promote health in consultation with public health professionals and community stakeholders. In identifying priority actions, project teams and stakeholders should use factors that include the actions' likelihood of having significant effects on health and equity, responsiveness to community concerns, and feasibility of implementation to guide the prioritization process. Teams should consider the extent to which the actions will address health impacts of higher concern as well as the feasibility of implementation (in terms of cost, resources, technical constraints, etc.). Teams should provide a rationale for the selected strategies, as shown in the sample table found in Recommendations.

Products

- A description of key health issues (including social, environmental and economic factors) identified by stakeholders in the scoping conversation for assessing the project's connections to health. See Recommendations for a sample chart that captures this information.
- A description of how engaging public health professionals and community stakeholders informed the list of key health issues to be addressed by this project. Submit separately from sample chart seen in Recommendations.
- List (or asset map) of public health and community stakeholders involved. Submit separately from sample chart seen in Recommendations.
- List of potential actions to protect and promote health. See Recommendations for a sample chart that captures this information.
- List of selected interventions; description of reasons for implementing selected actions and rationale for not selecting the other identified potential interventions for implementation; and summary of how the selected actions may address health equity. See Recommendations for a sample chart that captures this information.

Step 2: Project Implementation and Monitoring

Purpose

Integrate the list of selected interventions and a plan for monitoring and evaluating your progress into the plan for project development.

Process

- Document and demonstrate how the analysis in Step 1 informed building and site design decisions, including modifications that were made in response to the findings and recommended actions that were identified in the information-gathering and health action plan phases.
- Develop a monitoring plan with performance metrics to evaluate the project's impact on resident health throughout the project life cycle (design, construction and operations).

Product

The plan should include:

- A summary of which modifications were made in response to the findings and recommended actions identified in the earlier phases. See Recommendations for a sample chart that captures this information.
- The performance metrics to be monitored. Include design metrics (metrics to determine how well the design team integrated the selected strategies into the project in a manner that will promote positive health outcomes), operations metrics (metrics that can be measured on a routine basis while the building is in operation to determine whether or not the building is performing as intended), and health metrics (metrics regarding resident health factors and, where possible, incidence or prevalence of key health outcomes in the resident and/or community population). See Recommendations for a sample chart that captures this information.
- Specific information on indicators, data sources, frequency, and roles and responsibilities for monitoring different information as per the sample chart in Recommendations in this section.
- Identify the individual or organization responsible for implementing and monitoring the selected strategy as well as the rate of how often the associated performance metrics will be monitored. See Recommendations for a sample chart that captures this information.

RATIONALE

Health Impact Assessments (HIAs) identify the potential effects of a proposed policy, project or program and offer practical options for maximizing health benefits and minimizing health risks. The process outlined in Criterion 1.2b does not include all steps of an HIA, but builds upon core HIA elements to allow project teams to identify and address important health issues. This process facilitates the identification of ways to optimize a project's impacts on the health and engagement of key stakeholders, including public health experts and community stakeholders, throughout the project life cycle through a more cost-effective approach. To learn more about HIA, please reference the National Resource Council guidance on HIAs (see Resources section).

RECOMMENDATIONS

Step 1: Create a Health Action Plan

EXAMPLE OF PARTIAL PRODUCT FOR CRITERION 1.2B, STEP 1:

KEY HEALTH ISSUE AND POPULATION GROUP	POTENTIAL INTERVENTIONS	EXAMPLES OF STRATEGIES	WAS THIS STRATEGY ELECTED? (YES/NO)	IF SELECTED, INDICATE HOW THIS STRATEGY WILL BE IMPLEMENTED	RATIONALE FOR SELECTING OR REJECTING THE EXAMPLE STRATEGY
High incidence of childhood asthma	Eliminate or reduce use of potential asthmagens	Prioritize the specification of hard surface flooring	Yes	Specification of linoleum for kitchens; cork flooring for bedrooms	High-impact strategy in terms of addressing health issue; also a flooring choice that reduces ongoing maintenance and replacement costs. Given the disparities in asthma rates by race, ethnicity and income in our community, this strategy will also help to address health equity.
Above-average prevalence of childhood obesity	Prioritize features that promote physical activity	Street infrastructure improvements to safely accommodate users of all ages, abilities and transportation modes	No	N/A	Our project team does not have the capacity to affect local transportation infrastructure
Above-average prevalence of childhood obesity	Prioritize features that promote physical activity	Playground	Yes	We will be including a 100-square-foot playground as part of our project	This feature will provide a local, safe space for the families living in our development to play and socialize. Otherwise, closest playspace is 2 miles from project; not easily accessible. Given the disparities in childhood obesity rates by race, ethnicity and income in our community, this strategy will also help to address health equity.

Project teams may also want to identify programming features you intend to provide to residents, such as nutritional classes, cooking courses, etc.

Step 2: Implement and Monitor

Definitions

Potential Performance Metrics: List of methods that could be used to evaluate the impact of the selected strategies on the population need.

Design Metrics: Metrics to determine how well the design team, at the design stage, integrated the selected strategies into the project in a manner that will promote positive health outcomes.

Operations Metrics: Metrics that can be measured on a routine basis while the building is in operation to determine whether or not the building is performing as intended.

Health Metrics: Metrics regarding resident health factors and, where possible, incidence or prevalence of key health outcomes in the resident and/or community population.

Selected Performance Metrics: List of the specific Potential Performance Metrics that will be implemented.

Roles, Responsibilities and Responsible Individual(s) and/or Organization(s): List of the roles and responsibilities necessary to measure the Selected Performance Metrics, including the specific individual and/or organization selected to fill that role and/or responsibility. Identify individual(s) or organization(s) that would be accountable to take action if any adverse results are found.

Frequency: The rate of how often the Selected Performance Metrics will be evaluated.

EXAMPLE OF PRODUCT FOR CRITERION 1.2B, STEP 2

INFORMATION IDENTIFIED IN STEP 1			NEW TABLE CELLS IN STEP 2			
POPULATION NEED	**SELECTED INTERVENTION(S)**	**SELECTED STRATEGY**	**POTENTIAL PERFORMANCE METRICS**	**SELECTED PERFORMANCE METRICS**	**RESPONSIBLE INDIVIDUAL(S) AND/OR ORGANIZATION(S)**	**FREQUENCY**
High incidence of childhood asthma	Eliminate or reduce use of potential asthmagens	Specification of linoleum for kitchens, cork flooring for bedrooms, etc.	**Design Metrics** No carpet is specified in the project plans and specs. All flooring materials specified are hard surfaces. **Operations Metrics** Screen indoor air for presence of asthmagens **Health Metrics** Incidence rate of acute asthma events	**Design Metrics** No carpet is specified in the project plans and specs. All flooring materials specified are hard surfaces. **Operations Metrics** Screen indoor air for presence of asthmagens **Health Metrics** Incidence rate of acute asthma events	**Design Metrics** Architect to certify that no carpet was utilized in the project design/ specifications. John Smith, ACME Inc., 123.456.7890 **Operations Metrics** Property manager will engage an IEQ consultant to measure formaldehyde levels in air once each quarter. Jane Doe, Company Inc., 234.456.5678 **Health Metrics** Housing provider will annually collect self-reported rates of asthma incidents among residents and track them over the life of the project. Or, housing provider will work with local hospital or health system to track and monitor rates of admission and re-admission for asthma incidents. Johnny Rocket, XYZ Company, 456.678.6789	**Design Metrics** To be certified on final plan set before construction start **Operations Metrics** To be measured once each quarter **Health Metrics** Annual survey

EXAMPLE OF PRODUCT FOR CRITERION 1.2B, STEP 2 (CONTINUED)

INFORMATION IDENTIFIED IN STEP 1			NEW TABLE CELLS IN STEP 2			
POPULATION NEED	**SELECTED INTERVENTION(S)**	**SELECTED STRATEGY**	**POTENTIAL PERFORMANCE METRICS**	**SELECTED PERFORMANCE METRICS**	**RESPONSIBLE INDIVIDUAL(S) AND/OR ORGANIZATION(S)**	**FREQUENCY**
Above average prevalence of childhood obesity	Prioritize physical activity promoting features; add outdoor lighting to playgrounds to allow use for more hours; add bike racks and storage	Add lighting to exterior park/ playground areas	**Design Metrics** Specific type of light used **Operations Metrics** Area is well lit during all hours of operation **Health Metrics** Self-reported rates of physical activity among residents; frequency of events/opportunities for physical activity and participation rates in these events; operations staff monitor playground use by keeping tally	**Design Metrics** Specified lighting for park/ playground areas complies with Criterion 5.5 as well as foot candle recommendations **Operations Metrics** Lighting density **Health Metrics** Frequency of events and opportunities for physical activity (e.g., "community field day" or walking groups) and associated participation rates	**Design Metrics** Architect to certify that specs include appropriate lighting fixtures. John Smith, ACME Inc., 123.456.7890 **Operations Metrics** Maintenance technician to measure lighting density once each quarter. Jane Doe, Company Inc., 234.456.5678 **Health Metrics** Residential Services Coordinator Beth Smith 123.456.7890	**Design Metrics** To be certified on final plan set before construction start **Operations Metrics** To be measured once each quarter **Health Metrics** Quarterly tracking of events and number of participants

Transparency

- Share your Step 2 table through the Green Building Information Gateway (*gbig.org*) and the Health Impact Project (*healthimpactproject@pewtrusts.org*).
- Produce an acknowledgment page or letter(s) of support from public health professionals and community stakeholders. Receive documentation from community stakeholders regarding their involvement in the identification and prioritization of actions to protect and promote health (completed in Step 2) and their level of support for the health action plan. Note that project teams need to obtain consent from any community and team members to be listed in the acknowledgments page.
- Note where health-related items have been incorporated into project documentation, including plans and specifications.

RESOURCES

- Data sources for measuring baseline health: Provided in the Resources section of Criterion 1.2a. See also the Human Impact Partners resources listed below.
- The American Planning Association and the National Association of County and City Health Officials webinar, "Planning for Healthy Places with Health Impact Assessments": This online course explains the value of and the steps involved in conducting an HIA. *http://advance.captus.com/Planning/hia2/home.aspx*
- The Mariposa Healthy Living Toolkit: This toolkit provides a guide for assessing the health conditions of residents and identifying opportunities to improve health during community redevelopment projects. *http://mithun.com/special/Mariposa_Healthy_Living_Initiative/*
- Health Impact Project's interactive map of HIAs: This interactive map allows users to sort and analyze data on completed and in-progress HIAs in the U.S. *www.pewtrusts.org/en/projects/health-impact-project*
- The Surgeon General's National Prevention Strategy: Healthy Communities factsheet: This document outlines actions that different organization types can take to support healthy and safe community environments. *www.surgeongeneral.gov/initiatives/prevention/strategy/healthy-safe-environments.pdf*
- Guidance and Best Practices in Stakeholder Participation in HIAs: This document provides recommended strategies for collaborating with stakeholders. *www.pewtrusts.org/en/projects/health-impact-project*
- Promoting Equity through the Practice of HIA: This document highlights strategies for and case examples of promoting equity through Health Impact Assessments. *www.pewtrusts.org/en/~/media/Assets/External-Sites/Health-Impact-Project/PromotingEquityHIA_final.pdf*
- Human Impact Partners: *www.humanimpact.org/capacity-building/hia-tools-and-resources/* Some suggested tools and resources for your use are:
  - *Roles for Collaborators:* This document provides examples of different partners that might be involved in a Health Impact Assessment and their roles.
  - *Rapid HIA Model:* This document provides guidance for conducting a Health Impact Assessment within a short timeline, while maintaining a high level of stakeholder engagement.
  - *Data sources table:* This table outlines data sources that may be useful in a Health Impact Assessment.
- Mithun Cultural Audit Tool: The Cultural Audit attempts to collect diverse community input from a broad constituency and helps to form a more inclusive picture of the community. *http://stage2.mithun.com/projects/type/culturalaudit/*
- National Research Council Improving Health in the United States: The Role of Health Impact Assessment and related brief: These documents provide an overview and a definition of "health impact assessment," examples of methods for analyzing potential health impacts of a project, and best practices for monitoring the project's impacts on health. *www.nap.edu/catalog/13229/improving-health-in-the-united-states-the-role-of-health* and *http://dels.nas.edu/resources/static-assets/materials-based-on-reports/reports-in-brief/Health-Impact-Assessment-Report-Brief-Final.pdf*
- Minimum Elements of Health Impact Assessment (v3): This document describes the essential elements of and standards for a Health Impact Assessment. *http://hiasociety.org/wp-content/uploads/2013/11/HIA-Practice-Standards-September-2014.pdf*

Appendix B: Kickoff Meeting Agenda and Participant List

July 29 Kickoff Meeting Agenda

DATE, TIME, LOCATION

Friday July 29, 2016
8:30-4:00 (*breakfast available at 8:30, program begins at 9:00*)
Hawaii Room (3rd floor), Pew Charitable Trusts, 901 E Street NW, Washington, DC 20004
Closest Metro stop: Gallery Place Chinatown

OBJECTIVES

Clarity of awardee expectations, Cohort development, and Confidence in health/housing partnership opportunities

ATTENDEES

Grant HEDC: Chris Jordan (Grant HEDC), Frank O'Brien, Marissa Ramirez, Kristen Pawling (NRDC)
Gulf Coast Housing Partnership: David Harms (GCHP), Andrew Ryan (BeneFit)
LUCHA: Juan Carlos Linares (LUCHA), Charlene Andreas (LUCHA)
Mercy Housing Southeast: Selena Freeman Reese (Mercy Housing)
SKA Marin: Leah Moskowitz (SKA Marin), Rocio Acosta (Dattner Architects)
Health Impact Project: Abigail Baum, Ruth Lindberg, Rebecca Morley
Green Health Partnership: Kelly Worden (USGBC)
Enterprise: Ray Demers, Lindsay Duerr, Krista Egger, Vrunda Vaghela, Nella Young

AGENDA

8:30 Breakfast available
9:00 Welcome & Introductions
9:20 Objectives for Criterion 1.2b, the grant project, and the kickoff meeting
9:40 Grantees: Share your project & health-related goals (10 minutes per group to share, discussion to follow)
10:45 Discuss common themes, strengths, differences, and needs of the projects shared. Lead into initial introduction of Toolkit.
11:30 BREAK
11:45 Public health perspective in housing: Opportunities to integrate public health data, partners, and expertise into housing design and development
ACTIVITY AFTER DISCUSSION (may occur after lunch): mapping potential health intervention strategies along a map of the affordable housing development process timeline
12:45 BREAK
1:00 LUNCH / Focus Group
2:00 BREAK
2:15 Relate the project needs identified in the morning to useful public health interventions identified before lunch; strategize as to how best to address Criterion 1.2b for each project. Cohort groups to identify their potential next steps in developing a Health Action Plan and an implementation/monitoring plan. Will discuss Toolkit in greater detail, Community of Practice, and measurement and data collection activities.
3:00 Focus on Partnership: finding and working with a public health professional throughout the housing design and development process
3:30 Wrap-up, Feedback, Next Steps
4:00 Adjourn

July 29 Kickoff Attendees

1. Leah Moskowitz, SKA Marin
2. Rocio Acosta, Dattner Architects (teaming with SKA Marin)
3. Juan Carlos Linares, LUCHA
4. Charlene Andreas, LUCHA
5. Kristen Pawling, NRDC (teaming with Grant HEDC)
6. Chris Jordan, Grant HEDC
7. Frank O'Brien, Grant HEDC
8. Marissa Ramirez, NRDC (teaming with Grant HEDC)
9. David Harms, Gulf Coast Housing Partnership
10. Andrew Ryan, BeneFit (teaming with Gulf Coast Housing Partnership)
11. Selena Freeman, Mercy Housing Southeast
12. Abigail Baum, Health Impact Project
13. Ruth Lindberg, Health Impact Project
14. Rebecca Morley, Health Impact Project
15. Krista Egger, Enterprise Community Partners
16. Ray Demers, Enterprise Community Partners
17. Lindsay Duerr, Enterprise Community Partners
18. Nella Young, Enterprise Community Partners
19. Vrunda Vaghela, Enterprise Community Partners
20. Kelly Worden, Green Health Partnership / USGBC