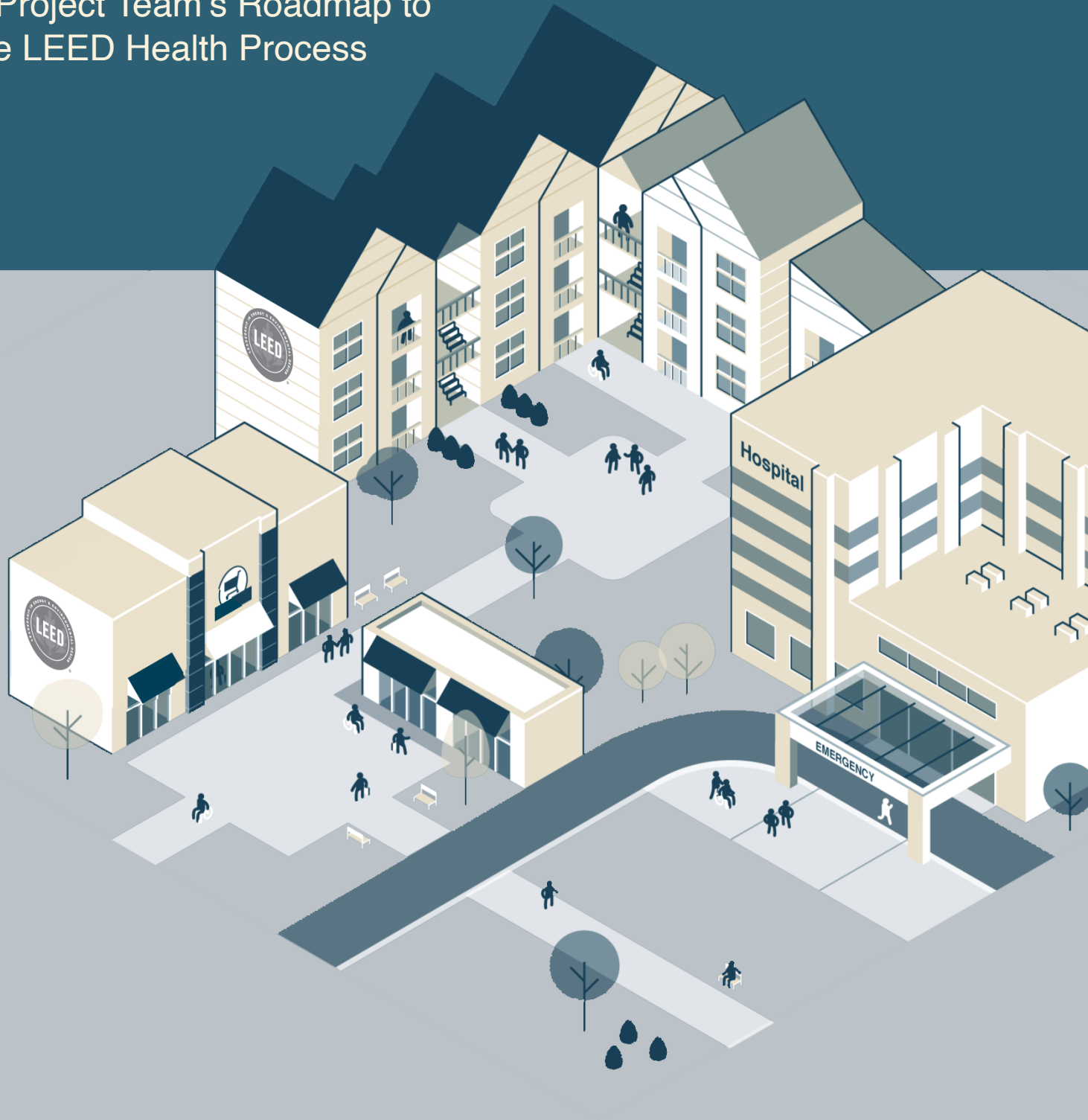


# Green Buildings for Health

A Project Team's Roadmap to the LEED Health Process



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## Introduction

**H** Health, social equity, and environmental sustainability are intertwined. Green buildings can promote population health and well-being in the near term while preserving resources and protecting the environment for human benefit in the long term.

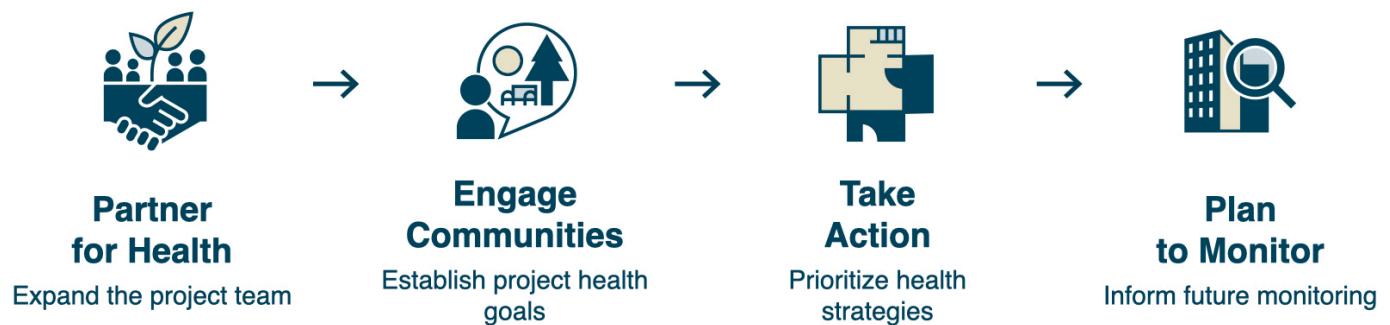
By intentionally deploying green strategies, building owners and industry professionals can simultaneously promote health at a variety of population scales. This translates into superior environments for occupants, safe and healthy sites for construction workers, reduced toxic exposure throughout the supply chain, improved health in surrounding communities and climate change mitigation that benefits global populations.

The LEED® Health Process, broken down in this *Roadmap*, offers a framework for building owners and design teams to prioritize health promotion within their approach to green building.

## About the LEED Health Process

The LEED Health Process provides project owners and practitioners with a framework for promoting population health through building design and construction, using a tailored approach and best available strategies from LEED and other frameworks. Specifically, the process guides teams to **engage public health knowledge** and **community perspectives** to form explicit health goals, **take action** to address those goals, and begin planning to **monitor impact**. This kind of targeted, needs-based process helps teams move beyond a standardized checklist to take a context-specific approach to health. Engaging public health knowledge can also help teams identify and respond to new health threats, such as the COVID-19 pandemic.

The LEED Health Process helps teams align health goals with environmental objectives for an integrated approach to project design and construction. Health promotion should not be viewed as an add on or as separate from a project’s approach to sustainability. Rather, owners and project teams are encouraged to utilize this *Roadmap* to incorporate health considerations and actions into existing decision-making processes, workshops and charrettes.



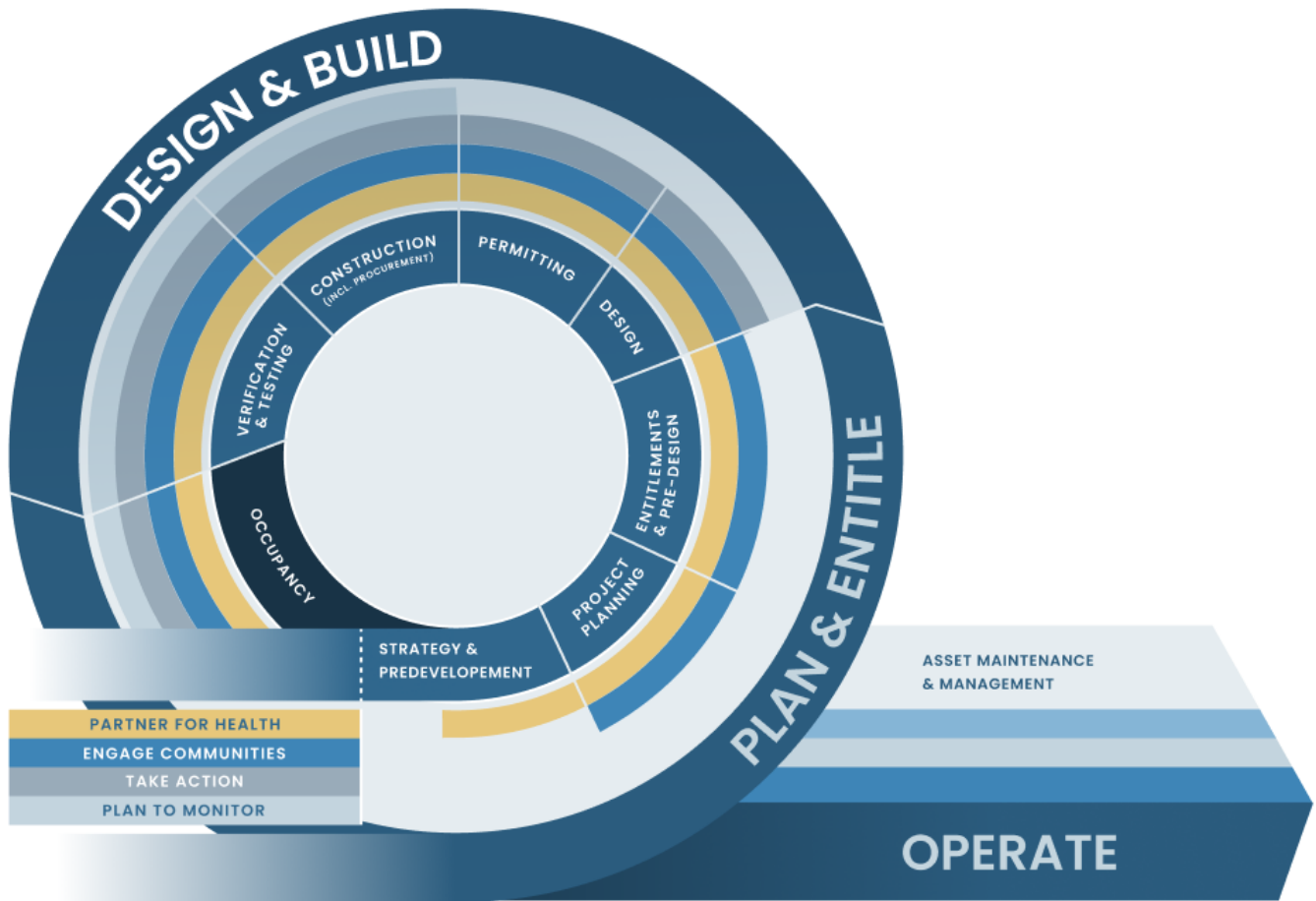


Image: The Green Health Partnership, inspired by [Centering Health Equity](#).

## The LEED Health Process

The LEED Health Process is available as the LEED v4 Integrative Process for Health Promotion Pilot Credit and within the LEED v4.1 Integrative Process credit. The process is aligned with 2020 Enterprise Green Communities Criterion 1.5, Design for Health and Well-being.

The Green Health Partnership, an initiative of the University of Virginia School of Medicine and the U.S. Green Building Council, developed the process in collaboration with Enterprise Community Partners and the Health Impact Project, a collaboration of the Robert Wood Johnson Foundation and The Pew Charitable Trusts.

The above figure maps out the LEED Health Process along a typical project development timeline. Not every project will follow this timeline exactly and it's never too late in a project to add a health lens.

## About This Guide

The purpose of the *Project Team’s Roadmap to the LEED Health Process in Green Buildings* is to support project teams as they incorporate health and well-being throughout the building design and construction process. This *Roadmap* focuses on new construction and major renovations, including interior design and construction.



- **STEP-BY-STEP** guidance for the LEED Health Process (also known as the LEED Integrative Process for Health Promotion pilot credit).
- **A PROCESS IMPROVEMENT TOOL** to enhance and supplement a building owner’s green building strategy.
- **AN EFFORT** to help owners and project teams incorporate public health and community perspectives into decision-making processes.
- **A COLLECTION** of resources to help projects promote health across all aspects of building design and construction.



- **A STAND-ALONE** certification process for health, well-being and equity.
- **A PRESCRIPTIVE SET** of health and well-being strategies for building design and construction..
- **A SUBSTITUTE** for subject matter experts on public health and social equity.

Public health and social equity are inextricably linked. In the context of the built environment, disparities in public health outcomes are largely driven by underlying social inequities. Throughout this guide, callout boxes provide examples of how owners and teams can incorporate social equity considerations into their projects. Additionally, the **Centering Health Equity beta framework** and these **additional resources** focused specifically on social equity can help teams take a more in-depth, holistic approach.

## Who is this Guide For?

The primary audience for the *Project Team's Roadmap to the LEED Health Process in Green Buildings* are Health Process Coordinator(s), the person or people principally responsible for integrating health promotion into the green building design process and facilitating conversations with the rest of the project team, developers, consultants, and other stakeholders. Although this guidance is primarily intended for the Health Process Coordinator, all members of the team would find the *Roadmap* a useful resource to support interdisciplinary application of the process.

In this version of the LEED Health Process guidance, the Health Process Coordinator is a member of the awarded design team, rather than a member of owner/client staff (for that type of guidance, see [An Owner's Roadmap to the LEED Health Process in Green Buildings](#)). While the Health Process Coordinator could be a dedicated position, it is likely that the Coordinator will serve in multiple roles. For instance, the Health Process Coordinator could be a member of the awarded design team or a health or sustainability consultant hired by the design team to facilitate the LEED Health Process.

For the construction or modernization of one building, the Health Process Coordinator is expected to need from **40-100+ hours** to implement the LEED Health Process depending on the project and the team's level of familiarity with health promotion. Regardless of the level of investment, appointing an official Health Process Coordinator helps ensure the process is continuously implemented throughout the project lifecycle.



## GETTING STARTED: Project Health Planning

When the Health Process Coordinator isn't on the owner/client side but is instead a member of the design team or a hired consultant, conversations will often begin with the Coordinator encouraging the client to use the LEED Health Process for their project. Consider using the [Centering Health Equity Influence and Decisions Mapping worksheet](#) to support initial project planning.

### Responding to Request for

When responding to an RFP, consider suggesting utilization of the LEED Health Process (also known as the LEED Integrative Process for Health Promotion pilot credit) to guide a health-oriented approach to green building. By including this within the RFP response, design teams are able to demonstrate their commitment to health promotion and begin a health-focused conversation with potential clients.





## I. PARTNER FOR HEALTH: Enlist Health Partners

The Health Process Coordinator will work with the client to identify a relevant health partner. This could mean engaging new departments from the client organization that offer a health or people oriented perspective such as HR, community outreach, workplace wellness, industrial hygiene. The health partner(s) could also be a public health consultant, a local community service organization and/or a health researcher on staff at the awarded design firm. Before identifying relevant health stakeholders, the Health Process Coordinator may want to review public health concepts and frameworks on how public health perspectives can contribute to facility planning and design. (A few of these concepts and frameworks are available within the Health Process Guidance & Resources section of this guide.)

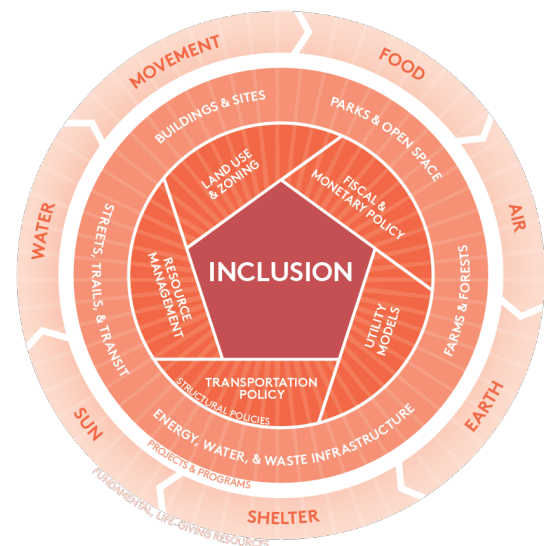
Projects that have capacity to address community health through project design should also consider reaching out to community-based organizations in the neighborhood surrounding the project. Community partners can provide insight on community priorities and help facilitate direct community engagement.

After enlisting a variety of perspectives on health, well-being, and equity, the Health Process Coordinator should host a planning workshop to facilitate introductions. Planning workshops help the interdisciplinary team get acquainted, kick-start the conversation about health and well-being promotion, and provide space to create and review organizational health values. Health Process Coordinators might ask those attending the workshop how they define health and well-being and how project design can support health goals and values. See more in the included [Workshops Guide](#).

### Social

Social determinants of health (SDOH) are the conditions in the environments in which people are born, live, learn, work, play, worship, and age that have a major impact on health, well-being, and quality of life. SDOH are typically grouped into five categories: economic stability, education access and quality, health care access and quality, social and community context, and neighborhood and built environment.

Through green building certification, project teams can have the most impact on the social and community context and neighborhood and built environment categories. For more information on applying SDOH principles to real estate practice, visit [this guide](#).



**Inclusion drives health:** By centering equity in their projects, individual practitioners have the power to increase equitable access to life-giving resources and promote health equity.



## **PARTNER FOR HEALTH: Equity Lens**

Aim for a diversity of cultural, gender, racial and ethnic backgrounds and perspectives when building your health process team. Consider how your team's demographics reflect those of both the owner organization and the community surrounding the project. Can the team shape engagement to address any demographic differences between the health process team and the impacted communities?

**[Resource: Racial Equity Impact Assessment and Racial Justice Organizational Assessment Tools - Consumer Health Foundation](#)**

**[Resource: Racial Equity and Social Justice Lens - Portland Public Schools](#)**





## 2. ENGAGE COMMUNITIES: Identify Community Needs & Goals

Use the knowledge and skills of health partners to engage with the project population, including occupants and the surrounding community. The engagement step of the LEED Health Process helps the team better understand the communities impacted by the project; identify the most pressing health, well-being, and social equity needs; and explore how the project might address those needs by creating an environment where all are equipped to thrive.

Depending on capacity and financial resources, the Health Process Coordinator and team may choose how much time to spend on assessing community needs, understanding that more extensive engagement leads to better understanding of the populations impacted by the project, which will help guide project design and development.

**Completing a needs assessment requires a holistic understanding of who will be impacted by project facility decisions. Relevant populations include:**

- Employees, residents, customers, and vendors/contractors (including service vendors and janitorial services), as site users of the building.
- Members of the broader community who live, work, and play in the area(s) surrounding the project site.
- Populations along the project's supply chain and waste stream that are affected by the sourcing of materials, consumption, and waste production.
- Global populations that are impacted by the project's resource consumption and greenhouse gas emissions.

Not every project will have the ability to prioritize health impact at all these scales. However, considering the project in a broader context will help the team identify which population scales offer opportunities to best leverage impact within available resources.

Create a community health profile with relevant information about the prioritized populations and associated health promotion opportunities. These profiles may require data collection from a variety of sources, which may be resource-intensive. To help address staff capacity concerns, consider enlisting a public health intern or graduate student to lead or contribute to the creation of community health profiles. Following are suggestions for collecting those data and insights (starting with those methods that are least resource-intensive to most):

- ◆ **Use existing data:** Depending on the project type, the owner might have relevant data and insights on hand. Potential data sources include:
  - **Office:** employee feedback surveys, local jobs created
  - **Residential:** resident surveys
  - **Industrial:** employee feedback surveys, local jobs created, workplace injury rate
  - **Retail:** local jobs created, tenant retention
  - **Healthcare:** remittance rates

- ◆ Publicly accessible data can provide project teams with a baseline understanding of the surrounding community. Potential data sources include:
  - [Opportunity 360](#)
  - [EJScreen](#)
  - Local public health department data dashboard
- ◆ Community partners will have insights regarding community health and priorities
  
- ◆ **Observe:** If the project is replacing an existing facility, observe the occupant experience in the existing facility. Note design features that may be improved, like spaces that encourage movement or areas for occupants to connect and de-stress.
  
- ◆ **Occupant engagement and feedback:** If the project has a known future group of users, utilize surveys and focus groups to better understand occupant preferences and priorities.
  - ◆ **Occupant survey:** This can also serve as a pre-occupancy survey to establish a baseline for occupant health and well-being and may be readministered after project completion to help measure success. (More information in the Plan to Monitor section of this guide).
  
- ◆ **Community engagement and feedback:** Directly engaging with surrounding communities—whether in person or via virtual meetings—helps amplify their voices and ensure that power sits with those communities. Their input and feedback should inform project goals and planning, thus supporting the project’s success. Topics to consider for direct community engagement include:
  - ◆ What is the history of this community?
  - ◆ Does the community have an existing relationship with the project owner? If so, how have the owner and surrounding neighborhood historically interacted?
  - ◆ What are the surrounding community’s priorities and needs? How might this project address those priorities?
  - ◆ How might this project foster a healthy relationship with the community?

After collecting community health data, the Health Process Coordinator will host a goal-setting workshop—which includes the facility team, health partners, design team and community partners (if applicable). The goal-setting workshop offers an opportunity to review community needs and define health promotion goals based on observations made during community engagement. During this workshop, participants review the health and well-being needs identified during community engagement, with special attention to engaging the voices and perspectives of team members who have not been involved in previous facilities decision-making processes, such as the health and/or community partners. Depending on the project timeline, the goal-setting workshop could be included as a section of the health design charrette discussed in the Take Action step. For additional guidance on hosting workshops throughout the LEED Health Process, see the [Workshops Guide](#).

## ENGAGE COMMUNITIES: Equity Lens

When engaging impacted communities, identify specific needs and priorities that might only affect smaller groups of staff, customers, residents and/or surrounding community members. When compiling data, go beyond averages. Disaggregate data by race, gender, and other relevant demographic and socio-economic variables such as housing insecurity, English Language Proficiency, and other factors.

- [Resource: How to Advance Equity Through Health Impact Assessments - SOPHIA](#)
- [Resource: Healthy Communities Initiative Equity Checklist - Jay Pitter Placemaking](#)
- [Resource: The Community Engagement Guide for Sustainable Communities - PolicyLink and the Kirwan Institute](#)
- [Resource: Comprehensive Community Needs Assessment Tool - Community Action Partnership's Data Hub](#)

Consider using a flexible engagement process that allows community members to provide feedback in a manner of their choice. Flexibility can be important when engaging populations of different ages, languages, and abilities.

- [Resource: Community Engagement - World Health Organization](#)
- [Resource: Engaging Community - AIA](#)

Explore the historical context of the surrounding community. If there is a history of harm or disinvestment in a particular population, consider how the project might address that history.

- [Resource: EJScreen - U.S. Environmental Protection Agency](#)

### *Community liaisons*

Project owners should consider hiring community representatives to inform and potentially lead community engagement. Providing compensation for this role, either through a stipend or otherwise, acknowledges the time, expertise, and value that community members bring to development projects.

- [Resource: Community Liaison Framework Quick Guide - Urban Health Partnerships](#)



### 3. TAKE ACTION: Prioritize & Implement Health and Well-Being Strategies

Throughout the discovery phase of the LEED Health Process, project teams learn more about the health needs and priorities of the populations impacted by the project and establish project health goals. During the Take Action step, teams will consider various health strategies for meeting those goals. These strategies may come from a variety of sources - organizational design criteria, credits from rating systems such as LEED, Enterprise Green Communities and/or the WELL Building Standard, principles from frameworks like active design and biophilic design. See the [Mariposa Healthy Living Initiative](#) in the resources section of this guide for inspiration on how to effectively combine different strategies from different rating systems and frameworks. Also focus on considering strategies both inside and outside of the project's walls to include explicit consideration of site design. The best way to prioritize these strategies to meet health and well-being goals is through a health design charrette to kick-start the implementation phase

#### 3A. PRIORITIZE STRATEGIES: Health Design Charrette

Continue crafting the project narrative, objectives, and criteria for success by holding a health design charrette with the project owner/client, health partners, and the design team. Health design charrettes provide an opportunity for the project team to align health promotion strategies and programs with knowledge and insights gained from the community engagement process. To support an integrated and holistic approach, a health design charrette should be incorporated into a green charrette early in the design process.

Ahead of the [health design charrette](#), the Health Process Coordinator should research available health and equity design strategies. All participants should review the project's health goals and come prepared to brainstorm specific strategies that could be implemented to address the project's health goals. Participants should think comprehensively about the factors that influence health and well-being for the populations impacted by the project. When considering which design strategies will best support project health goals, it may help to use a frame of software strategies versus hardware strategies.



## “Software” strategies

Health and social programmatic strategies that are planned to be held at the project site. This could include employee wellness, professional development, farmers’ markets, health clinics, resident services, etc.



## “Hardware” strategies

The design and construction strategies implemented to support a programmatic strategy. For example, inclusion of a wellness room.

Project teams should consider design and programmatic strategies that affect populations beyond the project’s walls. Although this guide focuses on creating positive impacts for a project’s users and surrounding community, teams should also consider potential impacts on the supply chain, waste stream, and global health. Strategies could address responsible sourcing of materials, construction worker health and safety, pollution prevention, and more.

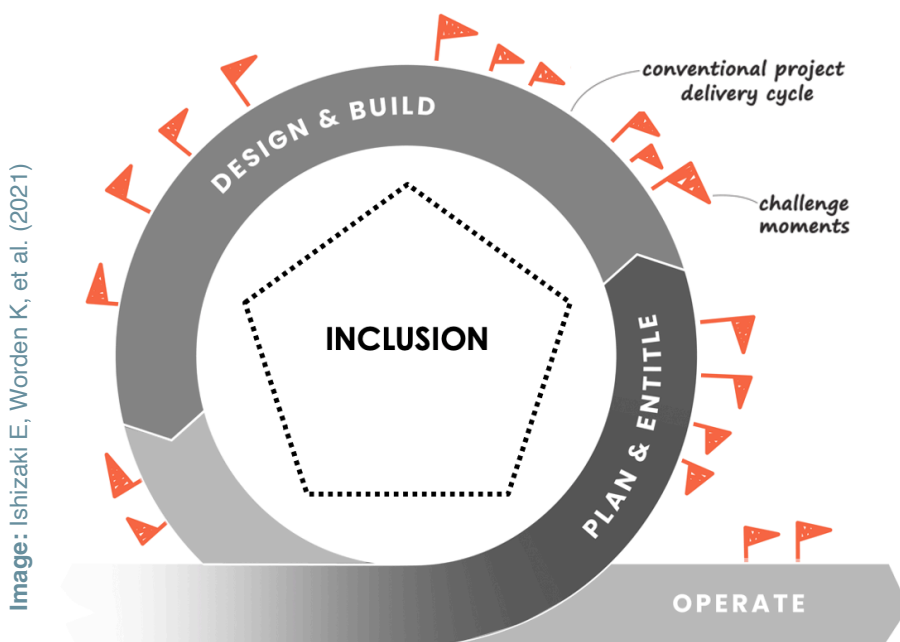
At this stage, project teams should document these opportunities in an initial set of health outcome priorities and potential strategies for the design and development team to test as schematic and design development moves forward. There are many ways to promote health. Design teams can use their creativity to find solutions that meet multiple objectives and align with project budgets.

### **Using LEED credits to promote health**

The LEED Health Process helps teams maximize the health-promotion potential of LEED and other rating systems. Within LEED, health-promoting credits are found in every credit category. Some flexible credits have multiple achievement pathways, only one of which is associated with a health benefit. By utilizing a health lens to prioritize specific credits and achievement pathways, teams can promote health alongside environmental goals. For support identifying and applying health-related LEED credits, see the [LEED Credits and Health Guide](#).

### 3B. IMPLEMENT STRATEGIES: Finalize Project Design

With the insights and knowledge gained from health partners, the community health profile, and health design charrette, the project team will move into the implementation phase of the LEED Health Process. The main objective for this phase is to ensure that the final project design addresses the project's health goals, with specified outcomes and goals in mind. During this phase, the Health Process Coordinator will continue collaborating with the design team to implement the prioritized health strategies through both project design and construction.



Built environment projects are driven by a delivery cycle that involves a variety of decision-makers at distinct and sometimes overlapping developmental stages. During the implementation phase, consider when prioritized actions need to take place and plant "opportunity flags" for health to orient project team decision-making around health equity goals. See the [Centering Health Equity beta framework](#) to explore this concept further.

The implementation phase also typically includes value engineering, the practice of maximizing the owner's budget by identifying and removing high cost/low value designs or materials as cost estimating is developed. It is important to identify milestone health strategy reviews and even benefits/burdens analyses at all project approval and costing milestones to reveal potential barriers to meeting the health objectives, criteria, and priorities established earlier in the project. Required health-promoting features, strategies, and criteria should be clearly defined in construction documents. The Health Process Coordinator should remain engaged with the design team(s) throughout implementation and serve as a resource to facilitate any questions or support decisions that may arise.



## TAKE ACTION: Equity Lens

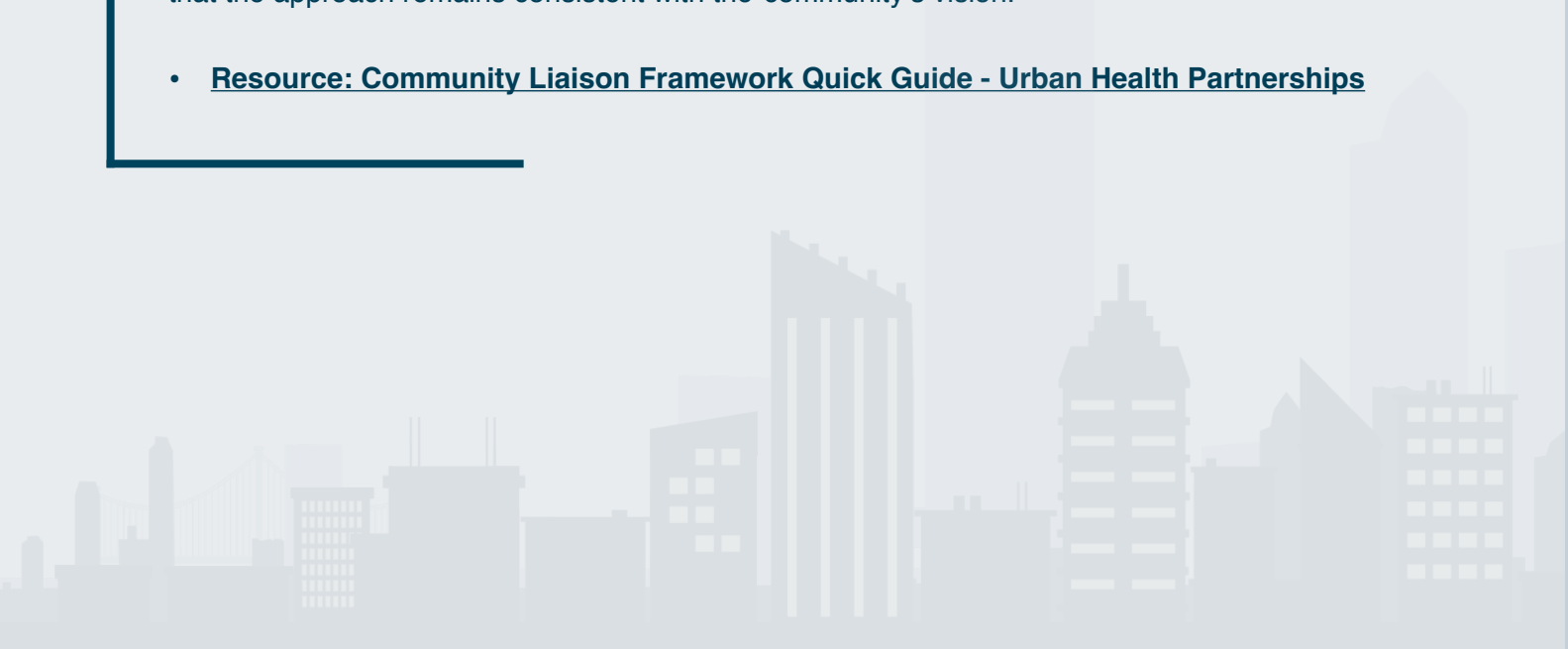
When prioritizing design strategies, ensure that discussion is grounded in an understanding of the project's unique cultural and demographic context. Think outside the traditional green building box to consider other strategies with documented impact on health and health equity, such as those related to trauma-informed design. Consider the unique relationship between the project and the surrounding community and how certain exterior and landscape strategies might promote community health. Throughout the design and construction process, the team should maintain open communication with the community to ensure that the project's approach remains aligned with community priorities. At a minimum, the team should communicate priorities and actions back to the community that was engaged to inform the project's health goals.

- **[Resource: LEED Project Team Checklist for Social Impact - U.S. Green Building Council Social Equity Working Group](#)**
- **[Resource: Introduction to equityXdesign - Equity Meets Design](#)**
- **[Resource: Equitable Development Frameworks: An Introduction and Comparison for Architects - AIA](#)**

### ***Community liaisons***

If engaging paid community liaisons, include these community members in project charrettes. Position community liaisons as active collaborators during the implementation process to ensure that the approach remains consistent with the community's vision.

- **[Resource: Community Liaison Framework Quick Guide - Urban Health Partnerships](#)**





## 4. PLAN TO MONITOR: Develop a Plan to Monitor Health Outcomes

In this step of the process, the design team works with the project owner to inform a longer-term monitoring and evaluation plan for assessing progress toward specific population health goals. While the design team likely won't be involved in future monitoring efforts, this step allows the designers to share their perspective on how the impact of specific design strategies might be assessed. Facilitating a conversation about monitoring impact at this project phase also creates space for innovative thinking regarding specific metrics.

### Formal certification and monitoring

Teams seeking formal recognition for following the LEED Integrative Process for Health Promotion pilot credit do not need to implement the monitoring plan. Instead, LEED project teams simply need to submit documentation describing the draft plan.

The public health “logic model” approach offers a helpful framework for discussing which metrics to use and how to measure health impacts, which are often difficult to see and take time to materialize. The logic model framework also inspired the documentation template for project monitoring and evaluation, available within the pilot credit [resource library on usgbc.org](http://resource.library.on.usgbc.org) and within the resources section of this guidance document. Using a logic model can help teams identify both short-term and longer-term metrics, many of which could be building and environmental metrics rather than traditional health metrics.

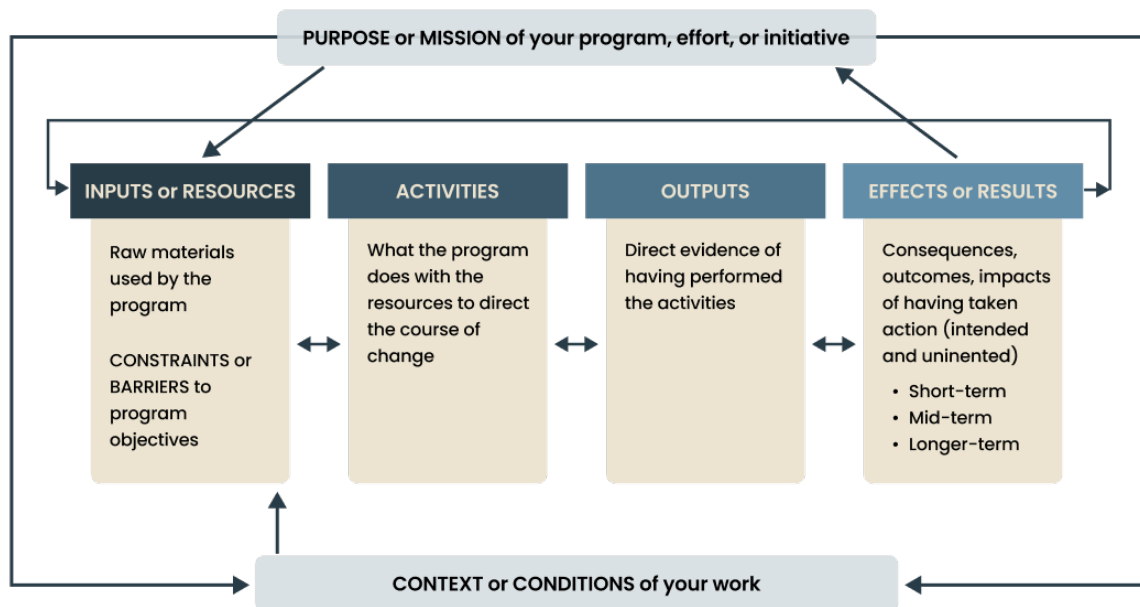


Image: Planning your evaluation: Key components of a logic model. Peers for Progress, UNC Gillings School of Global Public Health. 2021. Available from: <http://peersforprogress.org/resource-guide/planning-your-evaluation/>

Depending on the project's specifics and the project team's capacity, monitoring and evaluation strategies may be incorporated into the LEED Health Process in several ways. The following are possible pathways for monitoring and evaluation plans, starting with those approaches that are least time-intensive to most:

- ◆ **Occupant Surveys:** Pre- and post-occupancy health and well-being surveys may reveal how a project influences perceptions of sustainability, health, and equity, as well as behaviors related to the project's health goals. Pre-occupancy surveys, introduced in the "Engage Communities" section, help teams establish a health and well-being baseline. Post-occupancy surveys may be readministered after completing the project to help assess success.
  - **Surveys should be short and simple:** Ask basic, yet revealing questions related to the project's health and well-being goals. Work with your health partners to develop surveys.
  
- ◆ **Building Performance Data and Human Health Metrics:** You may choose to monitor health outcomes by considering the corresponding design and operation metrics based on the logic model approach described above. Relevant metrics could be quantitative or qualitative and provide information on facility performance (such as air quality, daylight level and energy efficiency), utilization of health programs and resources.
  - Performance data and metrics also may span the different phases of project development.
  - Platforms like **Arc Skoru** can help project teams understand building performance metrics for energy, water, waste, air quality and human experience.

Additional details on monitoring and evaluation and example surveys and plans may be found in the **[Monitoring Outcomes Guide](#)**.

## PLAN TO MONITOR: Equity Lens

Monitoring should track impacts that affect smaller groups of building users and/or members of surrounding communities. When creating a monitoring and evaluation plan, go beyond averages. Disaggregate data by race, gender, and relevant demographic variables. Sharing performance metrics with the community may help teams create a positive feedback loop for the project. Sharing data and metrics can increase transparency and help build a sense of trust and continued engagement with the community.

- **Resource: SEED Evaluator 4.0 - Social Economic Environmental Design Network (SEED Network)**
- **Resource: LEED Pilot Credit: Social Equity Within the Operations and Maintenance Staff - U.S. Green Building Council**



## Conclusion

Through the LEED Health Process, projects can create enduring, positive change to the health of their communities and gain a greater understanding of how the built environment influences the health and well-being of the people who live, learn, work, and/or play in their buildings. By using a process-oriented approach, owners and project teams can implement design and programmatic strategies tailored to their project's health goals.

With this guidance and its supplemental resources, the LEED Health Process should not require additional funding or cause any delays in the project delivery. On the contrary, anecdotal evidence suggests that this process can increase efficiency, especially when a project is approaching multiple goals at once (for instance Net Zero and health promotion). A portfolio owner or manager that finds this process valuable may consider adopting the LEED Health Process as a policy, either as a supplement to an existing green building requirement or as a stand-alone requirement.

For those owners and project teams seeking to formalize their commitment to health and well-being with LEED certification, many additional resources and templates for process documentation may be found on the LEED Integrative Process for Health Promotion pilot credit page on [USGBC.org](https://www.usgbc.org). The certification appendix at the end of this document will help teams map the LEED Health Process steps within this document to the formal steps of the pilot credit used for certification.

# Health Process Guidance & Resources

## PROJECT HEALTH PLANNING

### [Centering Health Equity Influence and Decision Mapping worksheet.](#)

When do critical decisions occur during the project delivery process? Use this worksheet to add notes or customize the timing and critical path decisions for your own project delivery and add key dates to a calendar.

## PARTNER FOR HEALTH: Enlist Health Partners

### [Workshops Guide.](#)

See the “planning workshop” portion of the associated Workshops Guide for support hosting an interdisciplinary planning workshop.

### [Social Determinants of Health for Real Estate.](#)

This guide gives an overview of the social determinants of health and their impact on health, well-being, equity, and quality of life. As green building practitioners, we can influence real estate practice to provide the best possible outcomes for communities, neighborhoods, and the built environment.

### [Enterprise Green Communities Technical Assistance Provider Registry.](#)

Explore the Enterprise Green Communities Technical Assistance Provider Registry and filter by “public health” to discover vetted consultants with experience approaching green building with a public health lens.

## ENGAGE COMMUNITIES: Identify Community Needs and Goals

### [Healthy Housing Outcomes Survey.](#)

Survey developed by Enterprise Community Partners and NeighborWorks America to measure changes in resident health outcomes most likely to be influenced by healthy housing development. This survey can be used as a point-in-time measurement of resident health related to housing but will be more impactful if administered annually to assess trends in the health and well-being of residents over time.

## ENGAGE COMMUNITIES: Identify Community Needs and Goals

(cont..)

### Opportunity360.

Opportunity360 is a comprehensive approach to help communities leverage their assets and understand their challenges through the use of cross-sector data, community engagement tools, case studies, and research. The community profile section provides critical context on the where and who of neighborhoods including local demographics and social factors.

### EJScreen.

An environmental justice mapping and screening tool that provides EPA with a nationally consistent dataset and approach for combining environmental and demographic indicators.

### GHP Goal Setting Worksheet.

GHP Goal Setting Worksheet. A Green Health Partnership resource to guide the exploration of health goals and priorities during goal-setting workshops. The worksheet also may facilitate introductory conversation between interdisciplinary stakeholders and teams.

## TAKE ACTION: Prioritize & Implement Health and Well-Being Strategies

### Workshops Guide.

A guidance tool to help the Health Process Coordinator plan for collaborative stakeholder workshops, review public health research, and set appropriate goals for the construction or modernization project.

- **Health Charrette Guide.** A guidance tool to help built environment project teams prepare for and host a visionary and planning meeting to discuss the health and well-being goals and desired outcomes of a project. Located within Workshops Guide

### Research Anthology of Health-Promoting Building Strategies.

Use this resource to identify health impacts of design choices and to justify design decisions based on desired health outcomes.

### LEED Credits and Health Guide.

A guidance tool providing information on the relationship between health and well-being and the credits available in the LEED v4 and v4.1 rating systems. The tool also identifies gaps in the credit library and potential strategies for other types of design features related to health and equity.



## TAKE ACTION: Prioritize & Implement Health and Well-Being Strategies

(cont..)

### Mariposa Healthy Living Toolkit.

This toolkit is an evidence-based guide to integrate health into real estate, developed by Mithun. The toolkit translates public health research and methods into an accessible, integrated process for developers and designers to baseline indicators, prioritize, and implement project strategies for well-being.

### Inclusive Healthy Places Framework.

This framework from the Gehl Institute (with support by the Robert Wood Johnson Foundation) serves as a guide to promoting inclusion and health in a variety of publicly accessible outdoor spaces.

### GHP Health Design Worksheet.

A collaborative document to be used in design workshops that frames health promotion into “software” and “hardware” strategies or programmatic and physical design strategies used to address specific health and well-being goals.

## PLAN TO MONITOR: Develop a Plan to Monitor Outcomes

### Monitoring Outcomes Guide.

A guidance tool to help the Health Process Coordinator and project team develop a plan to measure and observe the impacts of the project’s health and well-being strategies.

### MeasureUp.

A Build Healthy Places Network microsite of resources and tools to help you measure and describe the impact of your programs on families and communities and on factors related to health.

### Healthy Housing Outcomes Survey.

Survey developed by Enterprise Community Partners and NeighborWorks America to measure changes in resident health outcomes most likely to be influenced by healthy housing development. This survey can be used as a point-in-time measurement of resident health related to housing but will be more impactful if administered annually to assess trends in the health and well-being of residents over time.

## ADDITIONAL RESOURCES:

### LEED Health Process case studies:

- [Sandia National Laboratories corporate campus](#)
- [The Colorado Health Foundation office building](#)
- [Balboa Park Upper Yard affordable housing development](#)
- [Maceo May affordable housing development](#)
- [2060 Folsom affordable housing development](#)
- [John Lewis Elementary School](#)
- [DC Public Schools portfolio application](#)

## EQUITY LENS RESOURCES:

[Resource: Racial Equity Impact Assessment and Racial Justice Organizational Assessment Tools - Consumer Health Foundation](#)

[Resource: How to Advance Equity Through Health Impact Assessments - SOPHIA](#)

[Resource: Healthy Communities Initiative Equity Checklist - Jay Pitter Placemaking](#)

[Resource: The Community Engagement Guide for Sustainable Communities - PolicyLink and the Kirwan Institute](#)

[Resource: Comprehensive Community Needs Assessment Tool - Community Action Partnership's Data Hub](#)

[Resource: Community Engagement - World Health Organization](#)

[Resource: Engaging Community - AIA](#)

[Resource: EJScreen - U.S. Environmental Protection Agency](#)

[Resource: Community Liaison Framework Quick Guide - Urban Health Partnerships](#)

[Resource: LEED Project Team Checklist for Social Impact - U.S. Green Building Council Social Equity Working Group](#)

[Resource: Introduction to equityXdesign - Equity Meets Design](#)

[Resource: Equitable Development Frameworks: An Introduction and Comparison for Architects \(AIA\)](#)

[Resource: SEED Evaluator 4.0 - Social Economic Environmental Design Network \(SEED Network\)](#)

[Resource: LEED Pilot Credit: Social Equity Within the Operations and Maintenance Staff - U.S. Green Building Council](#)

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## About the Authors

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# Certification Appendix

This Certification Appendix is intended for project teams seeking to formalize their commitment to health and well-being by certifying with the [LEED Integrative Process for Health Promotion](#) (LEED Health Process) pilot credit in LEEDv4 or the [Integrative Process](#) credit in LEED v4.1. The purpose of this appendix is to map LEED Health Process steps within this document to the formal steps of the pilot credit used to certify and to help teams navigate the pilot credit resources on USGBC.org.

Below are the steps of the LEED Health Process with their accompanying Integrative Process for Health Promotion pilot credit steps:

**Partner for Health:** Enlist Health Partners

- Step 1 - Team with a Public Health Partner

**Engage Communities:** Identify Community Needs and Goals

- Step 2 - Identify the Communities
- Step 3 - Conduct Preliminary Research and Analysis

**Take Action:** Prioritize & Implement Health and Well-Being Strategies

- Step 4 - Convene a Goal-Setting Workshop
- Step 5 - Evaluate Possible Health Strategies

**Plan to Monitor:** Develop a Plan to Monitor Health Outcomes

- Step 6 - Document How Analysis Informed Design and Building
- Step 7 - Develop a Monitoring and Evaluation Plan

Several resources are available on the pilot credit page to assist project teams with the documentation requirements for the LEED Health Process. Teams may find that documenting progress as decisions are made and as workshops are concluded is beneficial. Included in the list below are GHP resources that help facilitate workshops and official pilot credit documentation resources from USGBC.org. Project teams may submit alternative forms or formats of documentation (narrative or otherwise) as long as the information provided is present and clear.

- [Worksheet: Setting Project Health Goals](#)
- [Worksheet: Health Design Charrette](#)
- [LEED Health Process Pilot Credit Documentation \(Excel\)](#)
- [LEED Health Process Pilot Credit Documentation \(Word\)](#)



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