

Green Schools for Health:

A Project Team's Roadmap to the LEED Health Process in Green Schools



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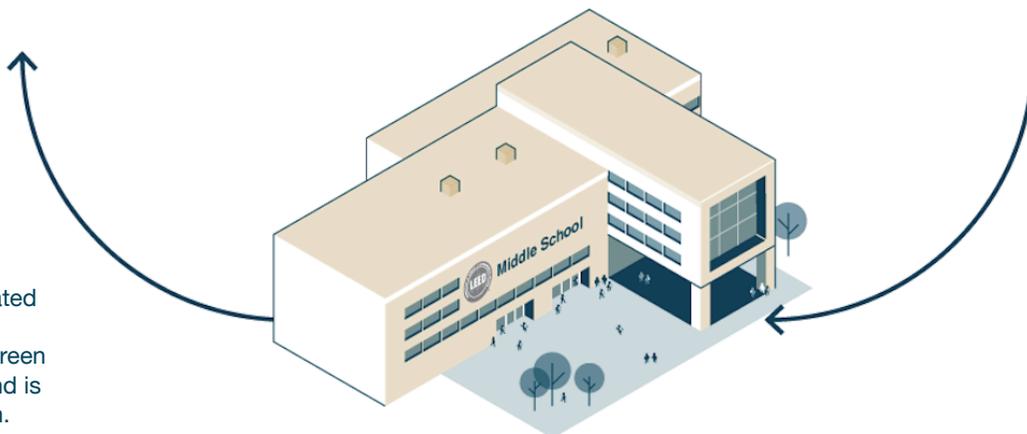
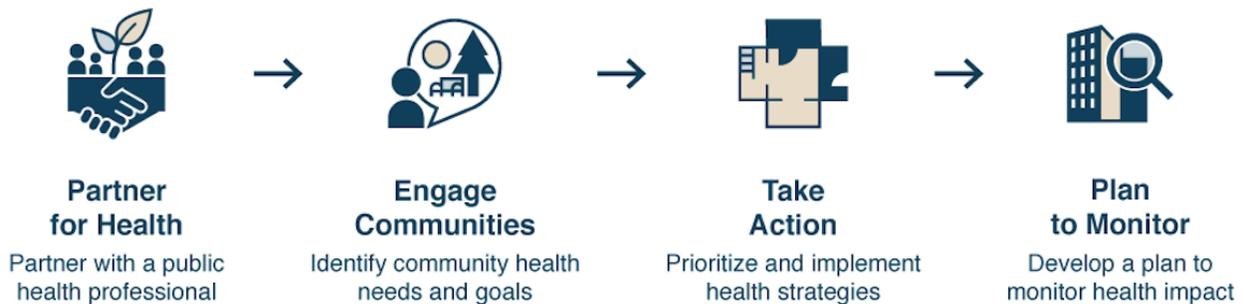
Introduction

A school can be an environmentally sustainable place that protects and promotes the health and well-being of everyone who interacts with it, including students, staff, and people from surrounding communities. Many school districts and some states have green building policies for modernization projects that may be leveraged to promote co-benefits including population health, social equity, and sustainability. The ****LEED® Health Process**, broken down in this *Roadmap*, offers a framework for design and school facilities teams to integrate health promotion into school modernization projects and incorporate health more explicitly into green building practice.

About the LEED Health Process

Health, social equity, and environmental sustainability are intertwined. Traditional green building rating systems include several strategies that also promote human health and provide a solid starting point for project teams to build health into schools. However, maximizing modernization projects to advance health promotion requires thoughtful and explicit action from building owners and practitioners.

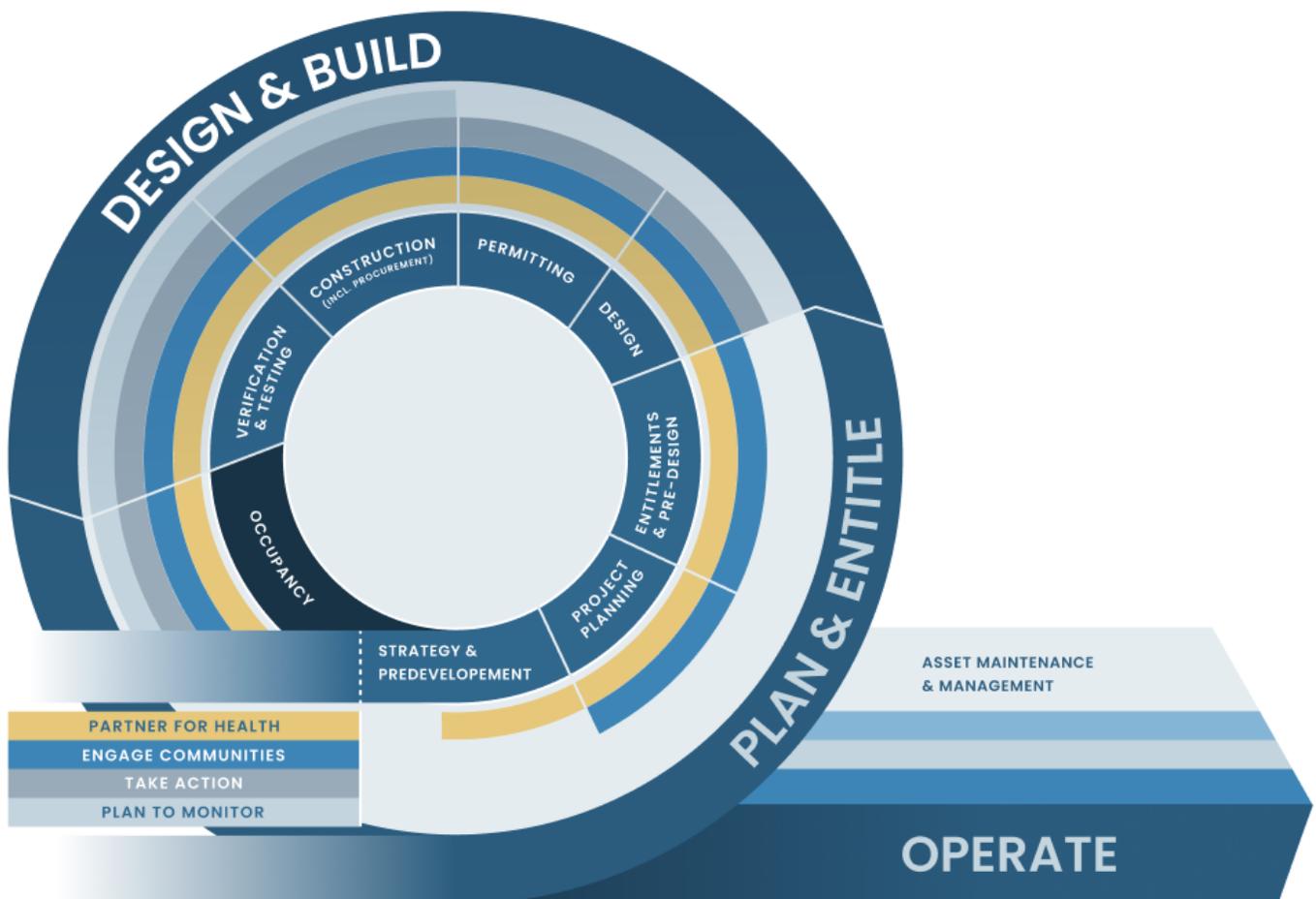
The LEED Health Process provides building owners and practitioners with a framework for promoting population health through building design and construction, using a tailored approach and best available strategies from LEED and other frameworks. Specifically, the process guides teams on how to **engage public health expertise** 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 can more quickly advance positive outcomes for schools beyond what they could expect from a standardized checklist. The process also identifies new ways for teams to connect with district health staff around health promotion—for example, by identifying and responding to new health threats, such as the COVID-19 pandemic.



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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 also 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.



See the LEED Health Process, here mapped out along a typical project development timeline. Partnering with health professionals should ideally begin in strategy and predevelopment, community engagement throughout the entire project lifecycle, taking action to implement healthy strategies during the design & build phase, and creating a plan to monitor outcomes throughout the design and operations phases. Not every project will follow this timeline exactly. Health promotion efforts will likely differ between projects, but can and should be incorporated at every stage of project development.

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

About This Guide

The purpose of the *Design Team’s Roadmap to the LEED Health Process in Green Schools* is to support design teams as they incorporate health and well-being in Pre-K-12 school district facilities.

Public health and social equity are linked inextricably within our built environment. The places we spend time have a direct influence on our access to resources and social networks, so integrating health-promoting design features in an equitable way requires a deeper level of intentionality. Throughout this guide, callout boxes provide examples of how districts and teams can incorporate social equity considerations into their approaches to modernization and new construction projects. In addition, the [Centering Health Equity beta framework](#) and these [additional resources](#) focused specifically on social equity can help districts and teams take a more in-depth, holistic approach.

What This Guide Is

- **STEP-BY-STEP** guidance for the LEED Health Process pilot credit.
- **A PROCESS IMPROVEMENT TOOL** to enhance and supplement a school green building strategy.
- **AN EFFORT** to help project teams improve community engagement and bring additional voices to decision-making processes.
- **A COLLECTION** of resources to help projects integrate health promotion across all aspects of school construction and modernization.

What This Guide Is Not

- **A STAND-ALONE** certification process for health, well-being and equity.
- **A PRESCRIPTIVE SET** of health and well-being strategies for school modernization projects.
- **A SUBSTITUTE** for subject matter experts on public health and social equity or for school counselors and mental health experts.

One of the primary features of the LEED Health Process is to help design teams leverage the health capacity and expertise of district-level health staff and engage with students and the school community throughout the project delivery process and facility life cycle. Consistent engagement with the school community not only benefits health and well-being outcomes, but also helps teams align health goals with a school’s existing environmental and sustainability objectives.

Who is this Guide For?

The primary audience for the *Project Team’s Roadmap to the LEED Health Process in Green Schools* are Health Process Coordinator(s), the person or people assigned principally responsible for integrating health promotion into the green school building design process and facilitating conversations with the rest of the design team, school facilities, developers, consultants, and other stakeholders. 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 school district staff (for that type of guidance, see [A District’s Roadmap to the LEED Health Process in Green Schools](#)). 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.

Although this guidance is primarily intended for the Health Process Coordinator, all members of the school design team would likely find the *Roadmap* a useful resource to help support interdisciplinary application of the process. This *Roadmap* focuses on projects for designing and building new schools or making significant modernizations and renovations to existing school structures, including interior design and construction.

For the construction or modernization of one school building, the Health Process Coordinator is expected to need **40-100+ hours** to implement the LEED Health Process depending on the project and the team’s level of familiarity with health-promotion processes.



GETTING STARTED: School District Health Planning

When the Health Process Coordinator is external to the school district—a member of the design team or a hired health/sustainability consultant, for example—conversations will often begin with encouraging district leaders to use the LEED Health Process for school modernization or construction. A design team may even help embed health goals into the district-level facilities plan so school districts can work to promote health throughout their portfolio.

Designers should work with district facilities leaders and other school staff to organize a multi-disciplinary, cross-sector project team before beginning the design process for an individual school. Health-oriented stakeholders internal to the school district, including nutrition, physical education, health services, counselors, and community relations, can help design teams gain a broader perspective on the needs of the community to inform the design and construction of new and modernized buildings for school health and well-being.

Responding to Request for Proposals (RFPs)

When responding to an RFP, consider suggesting utilization of the LEED Integrative Process for Health Promotion (LEED Health Process) 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 School District Health Partners

The LEED Health Process provides lasting value by helping design teams harness the existing knowledge and expertise of district-level health staff about priority student and staff needs and apply this perspective to school facility decision-making.

The Health Process Coordinator should work with the school district design manager to identify school district health professionals and gain approval to engage them in the facility planning process. Before reaching out to them, however, the Health Process Coordinator may want to review public health concepts and frameworks to begin developing an understanding of how health stakeholders might contribute to school facility decisions, a few of which are available within the Health Process Guidance & Resources section of this guide. Consider engaging experts from a range of health backgrounds, such as school district nurses, nutritionists and physical education professionals who possess essential school community health information, as well as social workers and guidance counselors. If they are interested and available, members of the school board, Superintendent, and Assistant Superintendent may also serve as highly valuable partners with deep knowledge of the school community.

Engaging these experts and compiling a breadth of perspectives on health, well-being, and equity needs can help ensure that school project planning, design, and construction processes are as inclusive and informational as possible. Holding a planning workshop with district health staff, members of the facilities team and other relevant district stakeholders may also be beneficial. Planning workshops help the cross-departmental team get acquainted, kick-start the conversation about health and well-being promotion, and provide space to create and review district health values. See more in the included [Workshops Guide](#).

Social determinants of health

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 the school community. Can the team shape engagement to address any demographic differences between the internal health process team and the school community?

- [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 district health staff or health and sustainability consultants to plan and implement engagement alongside school users, including (if possible) principals, teachers, non-teaching staff, students, parents, and the surrounding community. A substantial body of evidence suggests that community engagement not only helps improve individual student achievement but also helps build a school culture that supports all students (McAlistar, 2013). The engagement step of the LEED Health Process helps the design team better understand the communities that may be impacted by the school project, identify the most pressing health, well-being and social equity needs and begin to explore how the school might help address those needs by building an environment where all students 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 school design and development.

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

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

Engaging communities across multiple schools

School modernization is an opportunity to improve sustainability, health and well-being, and equity for the school community —yet each community is unique and requires unique solutions. If a district is managing multiple construction, renovation, or modernization projects simultaneously, the Health Process Coordinator and project team should conduct and budget for community engagement specific to each school project, recognizing that each school population will have distinct needs that affect their respective communities in different ways.

Not every school 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 School Community Health Profile (located within the [Community Health Profile Guide](#)) 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 School Community Health Profiles. Public health students are uniquely qualified to assist with health profile assessments and coordinate outreach with schools. Following are suggestions for collecting those data and insights (starting with those methods that are least resource-intensive to most):

- ◆ **Utilize existing data:** By collecting demographic data on student and staff populations, project teams will gain a greater appreciation for the people to be affected by the project. The district likely has access to school-level health data, including illness incidence, chronic conditions and illness-related absenteeism. Engage district health staff (nursing, nutrition, physical education) to develop an understanding of baseline community health status and the most pressing health challenges.
- ◆ **School observation:** For a modernization or replacement project, observe the pre-modernization school environment and the school neighborhood to understand how students, staff, and/or surrounding community members interact with the existing school facility. Note design features that may be improved, like spaces that encourage movement, connection, and areas to de-stress.
- ◆ **Conduct community surveys:** Use surveys to better understand the school community's experience and perspective. Student, teacher, and school staff surveys can establish a baseline for health and well-being in the school and may be readministered after project completion to help measure success. It is important to distribute these surveys to students and staff before the modernization. (More information and sample survey questions are included in the "Plan to Monitor" section of this guide.)
- ◆ **Direct community engagement and feedback:** Directly engaging with impacted 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:
 - How have the school and surrounding neighborhoods interacted historically?
 - Are there elements of the school building that have inspired pride or been detrimental to the surrounding community?
 - How may this project foster a healthy relationship between the school and the community?

After collecting community health data and creating a School Community Health Profile, project teams should host a goal-setting workshop—which includes the facility design team, school team and other health-oriented stakeholders. Goal-setting workshops offer an opportunity to review school community needs and define health promotion goals based on observations made during community engagement. Health Process Coordinators might ask those attending the workshop how they define health and well-being, how school design can support health goals and values, and how schools might track the impacts of their health promotion efforts.



ENGAGE COMMUNITIES: Equity Lens

When engaging impacted communities, identify specific needs and priorities that might only affect smaller groups of students, staff, 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, Guides for Equitable Practice - AIA](#)

Explore the historical context of both the school and the surrounding community. If a history of harm or disinvestment in a particular population exists, consider how the school facility might address that history.

- [Resource: EJScreen - U.S. Environmental Protection Agency](#)
- [Resource: Land Justice Guide - Resource Generation](#)

Community liaisons

School districts and project teams also 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, design teams will focus on learning more about the school's health and well-being needs and preparing for the design process. During this time, teams will consider various health strategies for meeting the school's needs. These strategies may come from many different sources - school district reporting, counseling and health experts, credits from rating systems such as LEED or the WELL Building Standard, principles from frameworks like active design or trauma-informed design and school specific health and safety design frameworks. See the [Mariposa Healthy Living Toolkit](#) in the resources section of this guide for inspiration on how to effectively combine different strategies from different rating systems and frameworks. The best way to prioritize these strategies based on health and well-being goals for the school is to collaborate during a health design charrette. A charrette, or design workshop, will kick-start the implementation phase of the LEED Health Process.

3A. PRIORITIZE STRATEGIES: Health Design Charrette

Continue crafting the project narrative, objectives, and criteria for success by holding a health design charrette or workshop with members of the design team, school district facilities and staff, and school health experts. 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 building charrette early in the design process.

Hosting workshops for multiple school projects

Most design teams will work on only one school project within a district at a time. However, some design teams might work on multiple school projects within the same district at once. For teams working on multiple projects simultaneously, hosting a health design charrette or workshop for each school project will help teams select health-promoting design strategies specific to that school's health goals and unique context. Regardless, consistent collaboration with the district between projects helps both the design and school teams share knowledge and amplify their approach to health promotion.



Image: USGBC (2021)



During the health design charrette, participants review the health and well-being needs identified during community engagement, with special attention to engaging the voices and perspectives of team members and experts who have not been involved in previous facilities decision-making processes. Ahead of the [health design charrettes or workshops](#), all participants should review the project's health goals and come prepared to brainstorm specific school facility strategies that could be implemented to address the project's health goals.

All participants should think comprehensively about the factors that influence health and well-being for the school community. Potential questions to engage during the workshops include:

- How could design strategies improve physical, mental, and social well-being? And what are your common hurdles to improvement?
- What is the likelihood of strategies having significant effects on health and equity for populations impacted by the project?
- Which strategies are most responsive to community health needs and concerns?
- Are suggested strategies feasible in terms of cost, resources, technical constraints, etc.?
- What are the potential synergies between health promotion and other project goals, including sustainability performance?

When considering which design strategies will best support project health goals, it may help to use a frame of “software” strategies versus “hardware” strategies.



Programmatic strategies planned for a school based on the community's health and well-being needs. For example, a school-wide initiative to promote drinking water.



The design + construction strategies implemented to support an accompanying programmatic strategy. For example, drinking fountains strategically placed outside of gymnasiums or in highly trafficked hallways.

Project teams should consider both design and programmatic strategies that affect populations beyond the immediate school community. Though this guide also focuses on creating a positive impact for the school occupants and surrounding community, teams also should consider the impact a school modernization will have on the supply chain, waste stream and global health. Strategies could include 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 a health priority and design teams can use their creativity to find solutions that meet multiple objectives and align with project budgets.

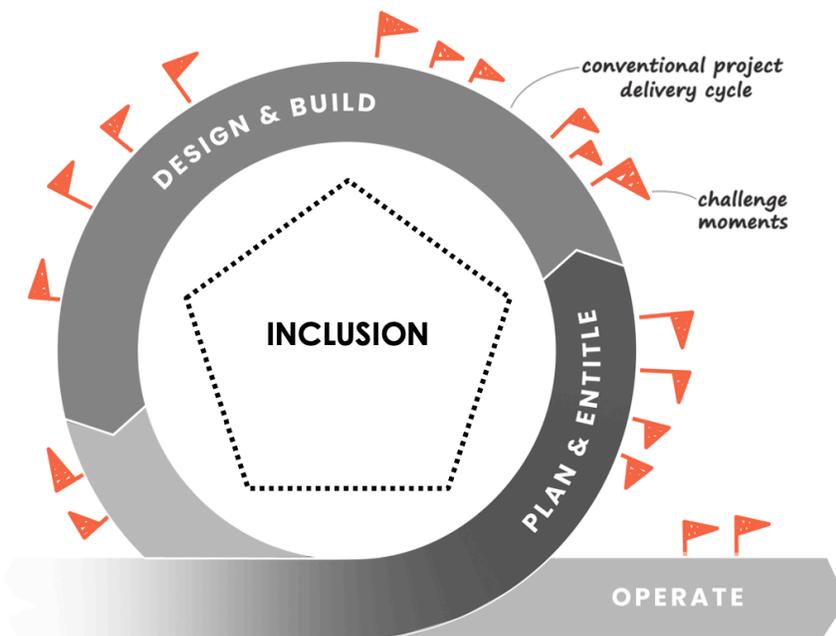
Using LEED credits to promote health

The LEED Health Process pilot credit was created to help project teams maximize the health-promotion potential of LEED and other building rating systems. Health-promoting credits may be found across credit categories. By prioritizing these credit requirements to align with other objectives, projects can target achievement of health goals most relevant to their populations. For a more detailed assessment of using LEED to promote school health and well-being, see the [LEED and Health Credit Guide](#).

3B. IMPLEMENT STRATEGIES: Finalize Project Design

With the insights and knowledge gained from health experts, community health profiles, and health design charrettes, 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 specified health goals or best practices, with anticipated positive outcomes in mind. During this phase of the process, continued collaboration with district facilities staff is important to ensure that the design features and programmatic strategies for the school project best support the needs of the students, staff, teachers, and community members who will interact with the building(s) regularly.

Image: Ishizaki E, Worden K, et al. (2021)



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 provide the Owner with information about potential impacts to the ability to meet 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 construction team, the school facilities team, and other stakeholders throughout implementation and serve as a resource to facilitate any questions or needed decisions that may arise.



TAKE ACTION: Equity Lens

When prioritizing design strategies, ensure that discussion is grounded in an understanding of the unique cultural and demographic context of the school and impacted communities, and acknowledge that the cultural and demographic context of every school is continually evolving. Think outside the traditional green building box to consider other strategies with documented impact on student health and health equity now and into the school's future, such as those related to trauma-informed design or those that incorporate community-created art pieces in schools. Also consider the unique relationship between a school facility and the surrounding community and how certain exterior and landscape strategies might support the joint use of facilities to 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 district staff to inform a longer-term monitoring and evaluation plan for assessing progress toward specific population health goals. While the design team may not be involved in future monitoring efforts, this step allows the designers to share 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 pilot credit do not need to implement the monitoring plan. Instead, LEED project teams simply need to submit documentation describing the plan.

The public health “logic model” approach offers a helpful framework for discussing which metrics to use and how to measure incremental progress toward 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](https://www.usgbc.org/resources) 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.

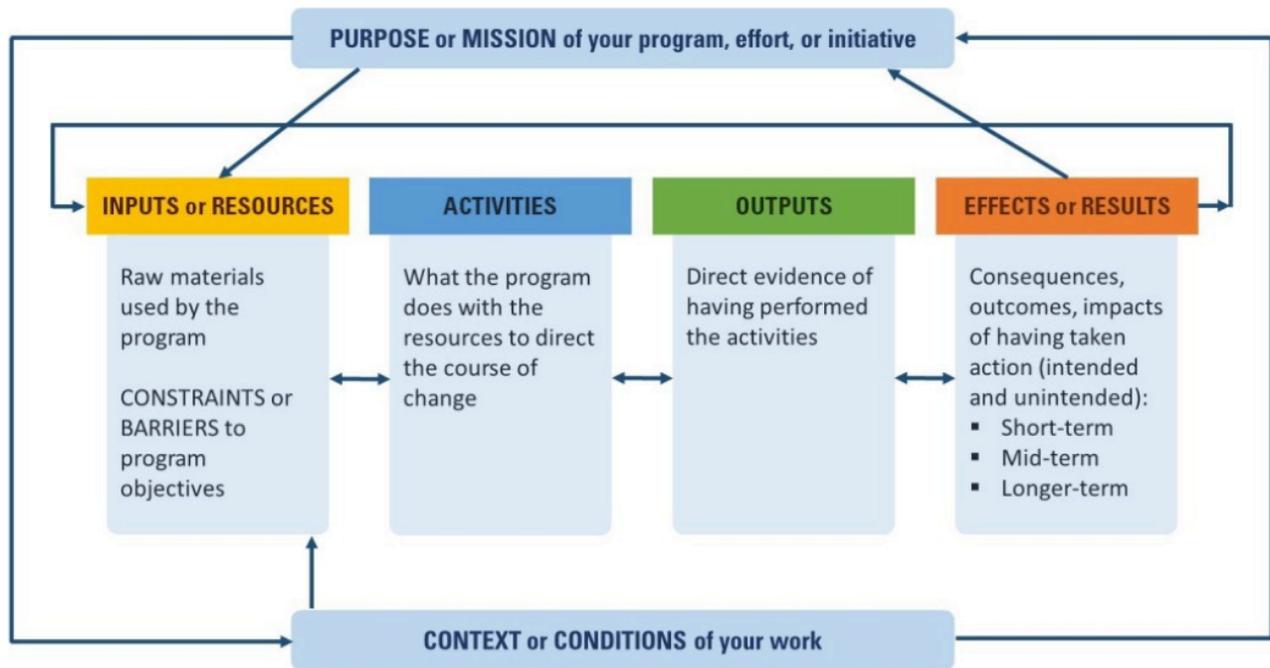


Image: Planning your evaluation: Key components of a logic model. Peers for Progress, UNC Gillings School of Global Public Health. 2021. Available from: <http://peersforprogress.org/resource-guide/planning-your-evaluation/>

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 school buildings influence perceptions of sustainability, health, and equity, as well as behaviors related to the schools’ health goals. Pre-occupancy surveys, introduced in the “Engage Communities” section, help teams establish a health and well-being baseline while students and staff are in their original school environments. 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 school’s health and well-being goals. Work with your health experts and stakeholders to develop different surveys for different student levels and staff members. Example questions could include:
 - Do you know where the following health services are located in your school building? When you feel anxious, nervous or stressed at school, do you have a “safe place” to retreat?
 - Do you use the community resources that your school provides (activities/programs/workshops) outside of school hours?



- ◆ **Building Performance Data and Human Health Metrics:** You may choose to monitor health outcomes by considering the corresponding design and operation metrics for their health and well-being goals. Relevant metrics could include quantitative and qualitative data and information on facility data like air quality and energy efficiency, and human health metrics such as absenteeism, childhood obesity rates, incidence rates of asthma, use and funding of community resources, community outreach for health and equity education, student and staff perspectives, and many more.
 - Performance data and metrics also may span the different phases of project development. For example, if an efficient HVAC system is embraced during the design phase, metrics may include an improved measurement of indoor air quality during the operations phase and decreased rates of asthma throughout the life of the building.
 - Platforms like [Arc Skoru](#) can help project teams understand building performance metrics for energy, water, waste, air quality and human experience. USGBC's Center for Green Schools helps districts get started with Arc in [this guide](#).

Additional details on monitoring and evaluation and example surveys and plans may be found in the [Monitoring Outcomes Guide](#). To support a continuous improvement approach to school community health outcomes, it is most helpful to spend some time upfront to plan how the district will gather information about building performance and human health, report, and use it over time. Helping schools devise a plan for monitoring also shows the design team's commitment to health and well-being promotion for their projects and may help showcase leadership in the field.

Design and planning for the school community's health and well-being is important, but the best way to ensure long-term success is to consider proactively how health will be monitored after the project is completed and how monitoring will inform ongoing operations. In a school setting, it is also possible to use monitoring as a teaching tool for students, creating health and sustainability lessons and other STEM learning lab projects.

PLAN TO MONITOR: Equity Lens

Monitoring should track impacts that affect smaller groups of students, staff 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 school 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, design teams can help school districts 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 learn, work and play in their schools. By using a process-oriented approach, teams can prioritize and implement design strategies tailored to the school’s health needs.

With this guidance and its supplemental resources, the LEED Health Process should not require additional funding and the modernization schedule should not be delayed. On the contrary, anecdotal evidence suggests that this process can increase efficiency. A design team that finds this process valuable may consider adopting the LEED Health Process as a standard approach to guide the design of future school projects.

For those design 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 Integrative Process for Health Promotion pilot credit page on 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

PARTNER FOR HEALTH: Enlist School District Health Partners

Workshops Guide. See the “Internal Planning Workshop” portion of the associated Workshops Guide for support hosting an interdisciplinary planning workshop. (Same resource as ‘Workshops Guide’ below.)

Foundations for Student Success. This report from Harvard T.H. Chan’s School of Public Health helps practitioners better understand how school buildings influence student health, thinking, and performance. Reading the report with your school’s population in mind may help project teams develop a public health perspective to support health-oriented decision-making throughout the project.

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 this 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

Community Health Profile Guide. A guidance tool to help the Health Process Coordinator and health experts prepare for and facilitate a community needs assessment to define priority community health needs and goals.

- **Community Profile Assessment Form.** A tool for collecting essential public health data and information on the affected population. Located in the Community Health Profile Guide.

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.

Physical Activity Design Guidelines for School Architecture. This paper aims to provide practitioners with strategies for making K-12 school environments conducive to healthy physical activity.

Healthy Eating Design Guidelines for School Architecture. This guide provides practitioners with a practical set of theory-based strategies for promoting healthy eating in school environments.

Research Anthology of Health-Promoting Building Strategies. A resource intended to support project the design and construction of projects that reflect proven health strategies. The anthology is broken down into eight key strategies, ranging from indoor air quality to active design. For each strategy area, design metrics and health outcomes are explained.

LEED and Health Credit 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 design features related to health and equity.

PLANT TO MONITOR: Develop A Plan to Monitor Health Outcomes

Monitoring Outcomes Guide. A guidance tool to help the Health Process Coordinator, health experts, and relevant stakeholders draft a plan to measure and observe the impacts that their school project health and well-being strategies have on the school population throughout the project life cycle.

Getting Started Guide: Using Arc in PreK-12 Schools. A guidance tool to aid in performance tracking and metrics, this guide gives districts an overview of the Arc platform and assists teams through project setup, data management and connecting sustainability lessons back to the classroom.

Impacts of Active School Design on School-Time Sedentary Behavior and Physical Activity: A Pilot Natural Experiment. This pilot natural experiment evaluated whether an elementary school designed to promote movement impacted students' school-time sedentary behavior and physical activity.

Additional Resources:

John Lewis Elementary (DCPS) Case Study. This case study features John Lewis Elementary, a PreK3-5th grade school part of D.C. Public Schools. The case study tells the story of LEED Health Process implementation from the perspective of Perkins Eastman DC, the awarded design team. The collaboration between DCPS and The Green Health Partnership inspired the creation of this *Roadmap*.

2021 State of Our Schools Report: America's PK-12 Public School Facilities. This report from the International WELL Building Institute (IWBI) and the National Council on School Facilities analyzes data on the funding of U.S. PK-12 public school facilities and draws attention to disparities in funding efforts.

Center for Green Schools IAQ Fact Sheet Series. A series of fact IAQ fact sheets (including ventilation, HVAC filtration, in-room air cleaners, and germicidal UV) designed to help people without a technical background understand indoor air quality so that they can make important decisions for their schools.



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.

Equity Lens Resources:

- [Racial Equity Impact Assessment and Racial Justice Organizational Assessment Tools - Consumer Health Foundation](#)
- [Racial Equity and Social Justice Lens - Portland Public Schools](#)
- [How to Advance Equity Through Health Impact Assessments - SOPHIA](#)
- [Healthy Communities Initiative Equity Checklist - Jay Pitter Placemaking](#)
- [The Community Engagement Guide for Sustainable Communities - PolicyLink and the Kirwan Institute](#)
- [Comprehensive Community Needs Assessment Tool - Community Action Partnership's Data Hub](#)
- [Community Engagement - World Health Organization](#)
- [Resource: Engaging Community - AIA](#)
- [EJScreen - U.S. Environmental Protection Agency](#)
- [Land Justice Guide - Resource Generation](#)
- [Community Liaison Framework Quick Guide - Urban Health Partnerships](#)
- [LEED Project Team Checklist for Social Impact - U.S. Green Building Council Social Equity Working Group](#)
- [Introduction to equityXdesign - Equity Meets Design](#)
- [Resource: Equitable Development Frameworks: An Introduction and Comparison for Architects - AIA](#)
- [SEED Evaluator 4.0 - Social Economic Environmental Design Network \(SEED Network\)](#)
- [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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The Center for Green Schools is a global leader in advancing green schools and providing schools and school districts with what they need to create sustainable, healthy, resilient, and equitable learning environments. We believe that all students deserve to attend sustainable schools that enhance their health and wellness, prepare them for green careers, and support a thriving planet. To advance green schools, the Center supports and trains those implementing sustainability within school systems, through professional development, peer networks, research, and advocacy.

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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:

Getting Started: School District Health Planning

- Step 0 - Making the Case for the LEED Health Process in Schools

Partner for Health: Enlist School District 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 is [Worksheet 1](#) and [Worksheet 2 - 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.

- [LEED Health Process Goal-Setting Worksheet and Health Design Worksheet](#) (located in the guide appendix)
- [LEED Health Process Pilot Credit Documentation \(Excel\)](#)
- [LEED Health Process Pilot Credit Documentation \(Word\)](#)

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