

The City of Hoboken in New Jersey achieved LEED certification in 2019.

# LEED IN MOTTON

HEALTH

December 2021



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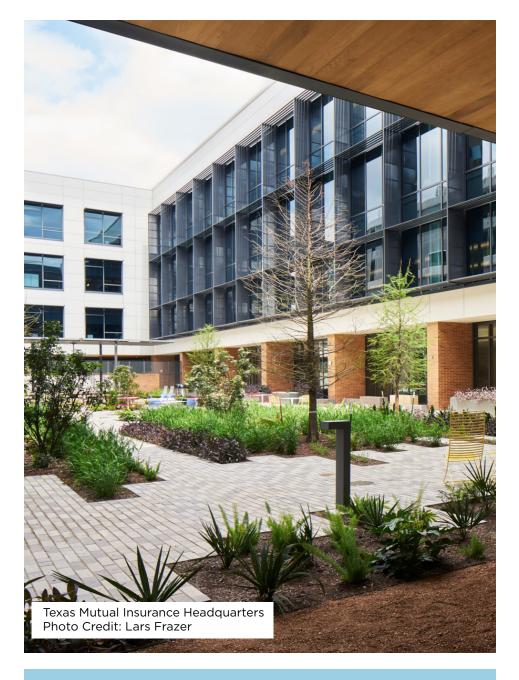
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Learn more about LEED and health. Visit usgbc.org

The LEED in Motion report series provides a holistic snapshot of the state of green building and LEED, the world's most widely used green building and performance rating system. These industry topic reports are aimed at equipping readers with the numbers and insights they need to build a strong case for sustainability.

LEED in Motion: Health examines how the LEED rating system is being used to transform the built environment in ways that contribute greatly to the health and well-being of people and the planet.

This report shows the stories of LEED users who are leading the way by taking action.



# **Foreword**



Aaron Bernstein, M.D., MPH Interim Director, The Center for Climate, Health, and the Global Environment at Harvard T.H. Chan School of Public Health (Harvard Chan C-CHANGE),

Pediatric Hospitalist, Boston Children's Hospital Chair of the Board of Directors, U.S. Green Building Council

When I started treating children as a pediatrician 15 years ago, few people recognized how much our buildings matter to us. Today, we can scarcely detach the buildings we occupy from our survival. The pressing example of COVID-19 showcases

the imprint of walls, windows, ventilation systems, materials and much else in buildings on our bodies. Long-term air pollution exposure has been associated with greater risks of death from disease. Buildings better able to remove air pollution (and not produce it in the first place) matter to disease spread and severity—and that's true not just of COVID-19, but also for the seasonal flu and other diseases transmitted by coughs and sneezes.

The interface between buildings and health made plain during the pandemic is a sneak preview of the story of buildings and climate change. The built environment can buffer our health from climate shocks like hurricanes, fires and heat waves. We've all seen images of buildings that withstood fires, floods and gales next to those that didn't.

We also know that buildings gulp down as much as 40% of all energy used in the United States and other developed nations. That energy still comes mostly from fossil fuels, and when fossil fuels are burned, they exact immense harm. Worldwide, air pollution from fossil fuels leads to the deaths of 8 million people—one in five worldwide and as many as 350,000 in the United States each year. The more we improve energy efficiency in buildings, the more lives we will save from air pollution today and climate shocks throughout the century and beyond.

LEED has contributed to pushing us forward toward a future that wastes less and promotes health. In the pandemic, and amid worsening climate shocks, we now see we have to do more, faster. Our work to advance healthier, more sustainable buildings and communities cannot be postponed. This is particularly so when it comes to the lives and welfare of the least fortunate members of our nation and world.

Air pollution is not an equal opportunity killer. Studies have shown that Black and Latin American communities, as well as low-wealth communities, are disproportionately affected by poor air quality. These same communities feel climate shocks the most. This means that when we build green, we get the greatest benefits when we do so in ways that protect low-wealth communities and communities of color.

We can now see so clearly how our actions matter—to our health today, to our children's welfare and their future, and to redressing the inequities that pandemics and climate shocks exploit. Our movement must meet this moment, where we can contribute so much for so many, and I have confidence that, together, we will.

The truth of the matter is that you always know the right thing to do. The hard part is doing it.

- Retired General Norman Schwarzkopf

# LEED and Human Health

Improving human health and well-being, along with mitigating climate change, are critical goals today. We are part of a pivotal time where we have the greatest opportunity to positively impact both concerns. USGBC recognizes that these two issues can be addressed together, along with resource consumption, equity and resilience.

Human health is a longstanding value of the green building movement. Green buildings protect 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.

It's well known that LEED certification supports significant reductions in energy use, water consumption, waste generation and more. LEED also has the ability to lower maintenance costs, increase tenant appeal and rents, and yield higher property values. What is not so widely understood is the plethora of health benefits that can be achieved through the rating system.



In fact, more than 60% of strategies within the LEED rating system are associated with occupant health, including guidance on improving indoor air quality, promoting physical activity and designing for health and comfort, among many others.

Health-promoting test strategies are also available via pilot credits. An example is LEED Integrative Process for Health Promotion, developed to help project teams identify and tailor LEED credits to achieve desired health outcomes. This begins with an early analysis of how the interrelationships among building systems will impact the physical, mental and social health of occupants. Then, as the project is implemented, that analysis can guide decision-making to ensure that those health objectives can be met.

Depending on the desired health objectives, various health-related strategies can be developed by combining different LEED credits involving site selection, landscape design and interior design.

By intentionally applying LEED strategies and credit requirements in this manner, project teams are well positioned to create superior environments that promote health and well-being, while also reducing toxic exposures throughout the supply chain, advancing the health of surrounding communities, and mitigating climate change to benefit global populations.

Integrative process for health promotion **Engage** community and public health expertise

**Understand** population health needs and opportunities

**Prioritize** action according to needs

**Evaluate** impact

# COVID-19 Response: LEED Safety First Pilot Credits

As part of USGBC's COVID-19 response, we developed LEED pilot credits that align with public health and building industry guidelines for cleaning and disinfecting, workplace reoccupancy, and HVAC and plumbing operations.

The **Cleaning and Disinfecting Your Space** credit requires facilities to create a policy and implement procedures supporting green cleaning best practices, a healthy indoor environment and worker safety. It also includes worker training and occupant education.

The Re-enter Your Workspace credit is a tool to assess and plan for reentry, as well as to measure progress once the space is occupied. It identifies sustainable requirements in building operations and human behavior that safeguard the health of occupants. It aligns with the AIA's Re-occupancy Assessment Tool and requires transparent reporting and evaluation of decisions to encourage continuous improvement.

The **Building Water System Recommissioning** credit reduces the risk of exposure to water that has been rendered unsafe by building closures or reduced occupancy. It addresses water quality from the community supply and the building's own internal systems, and it calls for a water management plan, coordination with local water and public health authorities, and the communication of water system activities and associated risks to occupants.





The Managing Indoor Air Quality During COVID-19 credit builds on LEED's existing indoor air quality requirements. It ensures that indoor air quality systems are operating as designed and helps determine temporary adjustments to ventilation that may minimize the spread of disease. Requirements are based on ASHRAE core recommendations, as well as on measures outlined in public health and industry resources.

The **Design for Indoor Air Quality and Infection Control credit** promotes HVAC system design considerations that prevent the airborne transmission of COVID-19 and/or other airborne diseases. Specific attention is given to ventilation and filtration.

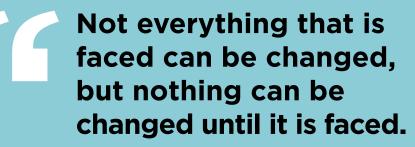
The Maintenance of HVAC Systems During COVID-19 credit protects the well-being of occupants by addressing indoor air quality issues that may influence the spread of airborne diseases. This credit supports the ongoing inspection and maintenance of commercial HVAC systems based on current guidance from ASHRAE.

The **Pandemic Planning credit** helps cities and communities prepare for, control and mitigate the spread of disease during a pandemic. It includes the establishment of a demographically and sociologically diverse task force to identify potential impacts and challenges, including those related to health care system readiness, domestic response and incident management.



The **Social Equity in Pandemic Planning credit** considers equity implications across all phases of the pandemic preparedness, planning and response process. It includes the appointment of a local equity officer and the creation of a Pandemic Community Advisory Group. Public communications, outreach and educational campaigns are also included.

The Arc Re-Entry credit supports the use of a comprehensive, integrated process to help facility teams manage the risk of infectious disease transmission. The process includes infection control policies and procedures, documentation of alignment with relevant public health authorities, repeated occupant feedback, and measurement of indoor air quality.



- James A. Baldwin



## **PERFORMANCE**

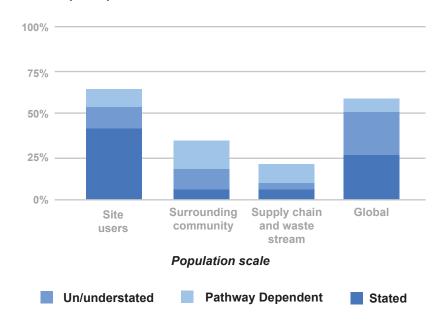
## **LEED Health Data**

LEED certification offers a template for making health promotion a standard consideration and priority within the buildings industry. LEED credits that improve health can be applied to buildings of all types, including commercial office, retail, school, health care and homes.

The resulting impacts can benefit the health and well-being of site users, surrounding communities, supply and waste stream communities, and even the global population. In 2020, two independent public health researchers examined LEED v4 rating systems to identify prerequisites and credits with a potential positive health impacts. Their research, "Using LEED Green Rating Systems to Promote Population Health," included these key findings:

#### Health Strategies in LEED Building Design and Construction

#### 68 total prerequisites and credits



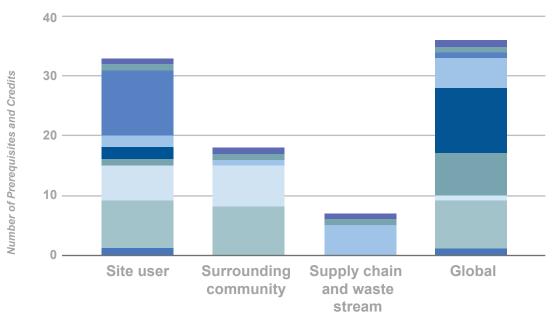
Decisions regarding healthy building design, construction and operation impact the health and well-being of populations at a variety of scales.

- Site users (e.g., occupants, visitors)
- The surrounding community
- Population impacted by a supply chain and/or waste stream
- Global population

# **PERFORMANCE**

#### Distribution of health-related prerequisites and credits

#### **LEED BD+C: New Construction and Major Renovation**



#### Population scale



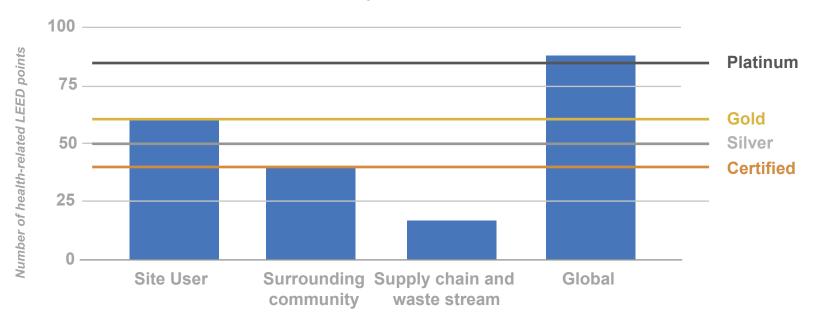
In the LEED v4 BD+C rating system,

- 65% of prerequisites and credits contain strategies that protect or promote health and well-being of site users
- 34% can benefit the surrounding community
- 21% include strategies relevant to the health of supply chain waste stream communities
- 58% have potential health relevance at the global scale

# **PERFORMANCE**

#### Incentives for health-related LEED credits

#### **LEED BD+C: New Construction and Major Renovation**



Population scale

Available health-related LEED points within LEED BD+C: New Construction and Major Renovation compared to point thresholds for LEED Certified, Silver, Gold and Platinum.

# Strategies and Outcomes

You never change things by fighting the existing reality. To change something, build a new model that makes the existing model obsolete.

- R. Buckminster Fuller

Leading long and healthy lives is not a privilege—it's a right for everyone. Improved health and productivity benefits are playing a larger-than-ever role in driving companies to invest in green building.

LEED, which has been committed to healthy buildings since its inception, continues to expand its commitment to occupant health and safety.

#### INDOOR AIR QUALITY

Retailers can help lower demand for energy in their spaces by employing Air quality is affected by all the chemical, radiological, biological and physical pollutants to which we are exposed inside of buildings. Related health issues are asthma, fatigue, physical irritation and headache. Poor indoor air quality is also associated with increased absenteeism and the transmission of infectious diseases. When people are exposed to high concentrations of highly toxic pollutants for long periods of time, chronic ailments such as cancer can also result.

Designing for effective indoor air quality not only helps avoid these issues, but can also provide a more comfortable indoor environment for building occupants. LEED design strategies include the installation of entryway systems to prevent contaminants from being brought inside, the use of enhanced filtration media, increased ventilation and monitoring strategies for ventilation systems. Each strategy alone is beneficial, but a combination of strategies is most effective.

Ventilation is a critical component. It introduces fresh air to a building and dilutes occupant- and product-generated pollutants. It also regulates air velocity, temperature and humidity. Poorly ventilated buildings are associated with headache, fatigue, sinus congestion, nausea, and irritation of the eye, nose, throat and skin. It is also associated with the transmission of airborne infections and cognitive performance. LEED outlines well-tested methods for determining the amount of outdoor air each type of space requires. These standards were chosen because they strike a balance between providing fresh air and maintaining energy efficiency.

#### THERMAL COMFORT

LEED defines thermal comfort as the complex blend of six primary factors: surface temperature, air temperature, humidity, air movement, metabolic rate and clothing—all of which are influenced by building design and operation. An effective thermal comfort strategy considers all six concurrently, meaning that close collaboration between building owners, architects and engineers is critical.

Health impacts related to poor thermal comfort range from itchy, watery eyes, headaches and respiratory symptoms to increased heart rate, negative mood and fatigue. Thermal comfort also affects task and cognitive performance.

Giving occupants  $\pm -5^{\circ}$ F (3°C) of local temperature control can result in productivity gains of 2.7% to 7%

Source: International Centre for Indoor Environment and Energy

Changes to one or more of the six comfort factors can greatly improve occupants' perception of the thermal environment, while still supporting energy reduction goals. Working closely with key stakeholders during design, a project team can maximize comfort by coordinating design with operational policies. Indoor environment quality surveys administered by the Center for the Built Environment have shown significant increases in satisfaction among occupants who have individual control of a thermostat or an operable window.

#### DAYLIGHTING AND VIEWS

Artificial lighting can lead to a disruption in our circadian rhythms that has been associated with increased risk for accidents, metabolic disorders, cardiovascular disease and even cancer. Poor views have been shown to increase stress and mental fatigue, while also reducing performance. At the same time, spaces with balanced lighting and quality views have been found to relieve stress and fatigue and improve performance.

LEED's approach to daylighting focuses on using simulated daylight analysis and actual measurement to estimate daylight quality and levels. These methods help predict daylight access and support the design process for optimizing it with simulation requirements that use global metrics and performance values.

There are many health benefits associated with views. In health care facilities, for example, studies show that providing patients with visual access to nature can shorten hospital stays and reduce stress, depression and even the use of pain medication. For office workers seated at computers, benefits include greater attentiveness, productivity and job satisfaction.

In LEED, designing for quality views involves several important considerations encompassing the structure's orientation, site design, façade and interior layout. Strategies include consideration for the quality of views provided to building occupants related to glazing color, frit and patterns as well as objects visible in the view (e.g., vegetation, sky, brick wall, busy street).

#### **ACOUSTICS AND NOISE**

Even at low levels, noise can disrupt performance, contribute to cardiovascular disease and sleep disturbance. Acoustic design is an effective way to mitigate this. In all LEED project types, well-designed acoustics can enhance the environmental quality of the space by facilitating communication, increasing productivity, improving the well-being of occupants, or aiding in noise control and speech privacy.

The benefits of open collaboration spaces should be balanced with acoustic design. In schools, where communication between students and teachers affects the learning process, acoustic performance is essential. In health care projects, the acoustic environment affects patients' privacy and recuperation. Careful sound isolation supports confidential personal health discussions among patients, families and caregivers; it also allows health care workers to communicate more effectively with one another.

# 145.5 million Americans may be chronically exposed to unhealthy levels of noise.

Source: Valuing Quiet: An Economic Assessment of U.S. Environmental Noise as a Cardiovascular Health Hazard



#### **MATERIALS**

Generally, building occupants have little to no knowledge of the components of the building that surrounds them. Given that disclosure data is hard to acquire, even project planners and interior designers often do not have sufficiently detailed information upon which to base their own selection criteria.

LEED aims to support manufacturers that disclose information about the ingredients of their products, allowing project teams to make better-informed decisions. Strategies use hazard assessment approaches that evaluate multiple human and environmental health endpoints, going beyond the scope of most life-cycle assessments.

#### **OPEN SPACES**

Open spaces provide many positive environmental benefits—habitat creation, linked habitat corridors in urban areas, increased rainwater infiltration and reduced heat island effect. When building occupants have opportunities to connect with the outdoors, they exhibit improved well-being and productivity.

Features can influence how spaces are used and their environmental benefits. For example, turf and paved plazas can encourage group activities that foster social interaction and include vegetation offer direct benefits to the environment. Open spaces with qualities that support environmental goals include community gardens, vegetated roofs, preserved habitats with learning opportunities, and gardens that provide visual interest throughout the year.

Sources: Harvard T.H. Chan School of Public Health; USGBC

What you do makes a difference, and you have to decide what kind of difference you want to make.

- Dr. Jane Goodall





# **PROJECTS**

# **LEED User Spotlight:**

# District of Columbia Public Schools

Washington, District of Columbia

In September 2018, Washington, D.C. Public Schools (DCPS) released requests for proposals for the modernization of four schools. A core requirement was that each project achieve a minimum of LEED Gold certification and use the LEED Health Process.

Under the guidance of its deputy chief of facilities, Andra Swiatocha, DCPS leadership worked to implement the use of the LEED Health Process pilot credit as a project guide. By applying this strategy at portfolio scale, DCPS was able to work with members of their internal facilities, health services, health and P.E., and food and nutrition teams to promote student, staff and community health through multiple schools undergoing modernization.

#### **Project Milestones:**

Identifying a Health Expert - Guided by the LEED Health Process credit, DCPS assembled a group of internal school health professionals to collaborate as health champions with the project design teams. Each member of the DCPS health team brought a unique understanding of the needs of the community and student population. They included professionals from both traditional and nontraditional health backgrounds—school district nurses, nutritionists, guidance counselors, social workers and more.

Assessing Community Needs - The DCPS health champions and design teams had several collaborative workshop sessions to evaluate the needs of each unique school community and create multidimensional health goals tailored to serve both staff and students. Based on school observations, the group created a set of baseline health goals to be universally applied, and another set of specific health goals for each individual school. Baseline health goals included physical activity, movement and enhancements to the building

environments (acoustics, thermal comfort, air quality and social spaces). Promoting nutrition, drinking water and access to mental health services were prioritized at the schools most in need.

**Taking Action** - After establishing baseline and school-specific health goals, the DCPS health champions team worked with each design team to identify and prioritize specific actions to address established goals. Design strategies included creating collaborative spaces for students to connect, retrofitting an auditorium for increased movement during assemblies, ensuring that clean water fountains were readily available, and making classroom spaces as acoustically and thermally comfortable as possible.

**Conclusion** – By using an intentional process to promote health, DCPS was able to implement designs that support targeted health goals, utilize the preexisting wellness policies and programs from their health services team, and gain a greater understanding of how the built environment can influence the health and well-being of the school community.



Photo Credit: District of Columbia Public Schools



Photo Credit: Perkins Eastman

# **PROJECTS**

# **LEED User Spotlight:**

# Texas Mutual Insurance Headquarters

Austin, Texas | LEED Gold

Texas Mutual Insurance Company, in close collaboration with its design team, prioritizes wellness design aspects to create a healthy and active workplace. The headquarters building is located within the Mueller development community, certified under LEED for Neighborhood Development—a pedestrian-friendly environment with walkable destinations, open green spaces and connections to public transit.

One of the primary goals of the project was to align itself with Design for Active Occupants, a LEED innovation strategy to promote physical activity in what would normally be a sedentary office environment. With LEED Gold and Austin Energy Green Building 4-Star certifications, the project took action to implement building design features that encourage an active lifestyle for current and future occupants.

These wellness features include accessible central staircases, activity-promotion signage and an on-site fitness center. To monitor the activity and health progress of occupants, Texas Mutual provides wearable devices to track activity, plus access for employees to an online portal that evaluates individual health scores and biometric data.

Additionally, this building provides complimentary healthy and locally sourced food and drink choices, biophilic elements, ergonomic workstations, public transit incentives, and access to natural daylight and work-friendly green spaces.

The company also offers a generous financial incentive to all employees who participate in an annual health risk assessment and biometric screening. Proprietary data collected from internal programs, combined with data from medical claims, provide key insights into the overall effectiveness of its corporate headquarters on occupant health.







Photo Credit: Lars Frazer

We've been given a warning by science and a wake-up call by nature. It's up to us now to heed them.

- Bill McKibben

# **LEED Professional Spotlight**

# Erin Christensen Ishizaki | Partner, Mithun

Erin Christensen Ishizaki is a national leader and advocate for healthy and sustainable urbanism who has pioneered the use of health impact assessments in design. Her areas of expertise include transit-oriented development, housing and high-performance districts. She believes in the power of a holistic, human-centric approach and evidence-based design to maximize investment and vibrant community outcomes.



### What is Mithun's Design for Health Initiative?

Because of his academic bent, Omer Mithun made sure that project research was part of the firm's DNA. The connection between research and occupant health started about 10 years ago with the Mariposa Healthy Living Initiative, part of a districtwide redevelopment plan in Denver. Because of the project's scale, we expanded the scope of our research to include a comprehensive health impact assessment, which merged the

professional guidance of public health professionals and community leaders with our design work. That engagement was where we began to understand the health issues and needs of the people who will occupy or frequent space that we're developing.

#### How do you approach a new project?

Our priority, from the beginning, is to thoroughly understand the different user groups and the range of people who might occupy the space. So, a first step is to meet with various service providers, property managers and community leaders. It's important to get a sense of what's going on in the area. Who are the people who will use the building? What are their racial and ethnic backgrounds? What are their ages? What are their incomes? What might be some key health considerations? Then, we also examine where the building will sit within the

community. We visit the site. Is it next to a superfund site? Is it in an easily walkable area? We try to get a clear sense of the community and the site.

With that level of understanding, we're smartly positioned to not only make sure that the project addresses the community's needs, but also that the transition from design and construction to occupancy is seamless. And that transition, that handoff, is critical when you're talking about the health of people in a community. If we've done a thorough job, our efforts will better support the life of the building and the people who are using it.



Sun Valley Redevelopment Master Plan and Healthy Living Initiative, Denver Colorado

# **PEOPLE**

#### What do you see as a top priority for the green buildingpublic health agenda?

Being able to deal with change. In just the past year, we've struggled with COVID-19, economic turmoil, social and racial reckonings. There have been unprecedented droughts and fires and tremendous storms. After all of that, I think it's essential that we anticipate there will be more change, and probably more dramatic change over time.

With those givens, it's not unreasonable to say that we can't rely on the same solutions that we've been using. And so, in terms of an agenda for green building and health, to me it's about getting our contemporaries—especially the designers and developers—to expect change, and to expect to continually need to evolve and improve our practices in ways that are truly sustainable and inclusive. Without that, it's going to be difficult to respond to the changes that we know are coming.

#### Where is the greatest demand for healthy buildings?

We are just seeing demand all over the place. It's amazing. When we started Design for Health a decade ago, we were just trying to make the basic case. Now we're seeing strong interest in every single market sector—and geographically across all the places we work. Everybody is talking about health and healthy buildings—especially with COVID-19 this past year.

# What would you say to your contemporaries? How can they move into this "design for health" space?

I would advise them to invest some time and attention into thinking about this line of business. There are a lot of ways that buildings can influence and improve individual and community health. And there are a lot of great tools and guidance available now, many more than there were just a few years ago. And this absolutely includes LEED.



Mariposa Healthy Living Initiative, Denver Colorado

# **LEED Professional Spotlight**

# Gail Vittori | Co-Director, The Center for Maximum Potential Building Systems

For more than three decades, Gail Vittori has been a catalyst for local, state and national initiatives advancing green building protocols, policies and prototypes with a focus on the intersection of green building and human health—where human health includes physical, mental and social well-being.



## What is the Center for Maximum Potential Building Systems?

Our mission statement says it best: "The Center is a non-profit education, research, and demonstration organization specializing in life cycle planning and design. We undertake projects based on their potential contribution to site, regional and global sustainability and human health, and actively pursue collaborations with associate organizations, businesses and professional firms."

One of our key operating principles is that buildings exist to serve people. They're not an abstract expression of genius or design expertise, though they can certainly be that; but if they're missing the fundamental purpose of serving people, or, to be more specific, advancing health, then it's a missed opportunity.

#### How does the Center bridge buildings and health?

Historically, the building community has been siloed: Architects design, developers build. In the early 2000s, I came to realize that what was missing from the equation was the public health perspective. If people on a project

don't understand a building's impact on occupant health—say, with respect to toxic exposure issues—then they're just going to close their eyes and use off-the-shelf standards that may or may not be applicable.

The Center has been instrumental in expanding the conversation to explicitly include health considerations by creating a more interdisciplinary framing of what constitutes design. So, going back to what's the role of the Center, we are very much a conduit for bringing together different stakeholders who had not previously shared a conversation.

# What's been your overall experience with LEED and healthy buildings?

From the early days of LEED, there has always been a very implicit recognition of the importance of health. It was not explicit. Now, however, LEED v4 has much more identifiable content that's specifically addressing human health, which puts that perspective in front of a lot of people who may not, themselves, have thought of it.

So, when LEED v4 comes out and there's a new vocabulary, new credits that more explicitly address health—for example, the Integrated Process credit that acknowledges social equity and health and well-being, or the Materials Ingredient credit that references the Health Product Declaration—LEED practitioners have something new to consider and have a "Wow, I never

# **PEOPLE**

thought of that" moment. Well...now you are thinking about it. And now you also have a credit that's going to help guide you and your team through the process to establish a methodology to support a strategy that has the potential to measurably benefit health.

### How much of this is a factor of COVID-19 and the call to invest in infrastructure?

COVID-19 has certainly awakened us to buildings as these environments that can contribute to the rapid spread of illness.

In terms of the broader infrastructure conversation, I believe that it will open the door to greater investments in green infrastructure—which, for the most part, is an untapped opportunity to create many more health-promoting environments. It would be great to see us make long-term investments in open spaces, electric vehicles, mass transit, solar and so on. With each of these, you can very easily establish a clear, health-positive outcome. It's not just about saving energy, it's also about promoting health.

#### What are the main obstacles to this transformation?

A lot of it has to do with education—or the lack thereof. That's what gets in the way of a good idea getting picked up and scaled up. And so, telling the story through publications like this, and through articles, webinars, blogs...all these things are helpful. In a similar vein, we should be rethinking how we train for the building professions. When someone is studying to be an architect or an engineer or a landscape architect or whatever, they should receive a thoroughly integrated view of performance—one that includes occupant health and, more broadly, public health.

When we look at the determinants of health, it's very clear that our social and physical environments are more influential than seeing a doctor about a preexisting condition, or even our genetic makeup. We need to more broadly recognize this kind of thinking across all building disciplines, so that everyone, throughout the industry, is familiar with fully integrated approaches that embrace healthy building solutions, and to establish health promotion as a key performance indicator at least on par with any other measure.



**Dell Children's Medical Center** | Austin, Texas LEED Platinum Photo credit: John Durant

# A Vision for the Future

The time has come to do more with less. As the consumption habits of the developed world begin to overwhelm our planet and impact the entire globe, we have a responsibility to devise solutions and use our resources responsibly.

There is a correlation between our consumption and natural challenges. A rapidly growing global population and our collective consumption is stressing the planet beyond its capacity. This starts on the individual level. It starts with the things we do every day-where we shop, eat and do business. There is hope for the future if we choose to spend wisely and to support businesses embracing responsible, resource-efficient practices.



