

# Elevating People’s Experiences in the Built Environment by Designing for Human Wellness

by Kathy Collins, Director of Sustainability, NV5

In our 21st century built environment, sustainability advocates are focused on creating spaces that support human health and wellness. With the world’s population estimated to exceed 9 billion by 2050, it is crucial that the places where we live, work, learn and relax keep building occupants healthy, productive, engaged and happy.

Driven to transform buildings and communities in ways that help people thrive, the International WELL Building Institute (IWBI) launched the WELL Building Standard™ (WELL™) in October 2014. Rooted in evidence-based, scientific research, this program provides a performance-based rating system that measures, verifies, monitors and certifies building features that impact human health and well-being.

### A Holistic Approach to Well-Being

WELL considers a broad range of regional health concerns, cultural norms and market realities, making the program relevant and readily applicable to spaces worldwide. It also references existing standards and best practice guidelines set by governmental and professional organizations. To date, WELL has been utilized in more than 40 countries on over 1,100 projects. The program’s premise is based on a holistic view of human vitality, providing a comprehensive approach to support physical, mental and emotional wellness through 10 concepts: Air, Water, Nourishment, Light, Movement, Thermal Comfort, Sound, Materials, Mind and Community.

While many in the building design and construction industry have heard about WELL, some are not clear on how it differs from LEED (Leadership in Energy and Environmental Design). Both programs have shared goals about sustainability, but WELL focuses more on how buildings impact the people inside them. In contrast, LEED concentrates on reducing impacts on the environment and how a building operates. WELL represents the next iteration of sustainable design with the purpose to promote good health and better decision-making in areas such as nutrition, exercise and social interactions.

WELL certification is administered through Green Business Certification Inc. (GBCI), a third-party certification entity that also administers LEED certification. Both programs operate on a points-based system, offering up to 110 points on each project to earn various types and levels of certification. WELL Buildings have to be re-certified every three years, whereas “new construction” LEED certifications never expire, and “existing building” LEED certifications expire every five years. WELL’s data-driven performance reviews and on-site environmental assessments also help to keep buildings continuously updated and their occupants informed.

IWBI champions the idea that green building certifications and WELL certifications can be complementary. Building owners and developers share in this belief since the majority of WELL-certified projects have also received a green building certification thanks to industry partners such as the U.S. Green Building Council (USGBC) who is helping to streamline and incentivize dual certifications. Thus, USGBC’s “crosswalk” of support helps to guide, synergize and streamline both sets of standards.



**WELL Feature-Movement: MOVEMENT NETWORK AND CIRCULATION**  
 “Take the Stairs!” - Using Stairs from the lobby help keep building occupants “active” as a healthy alternative to elevators. Provide signage to encourage occupants.

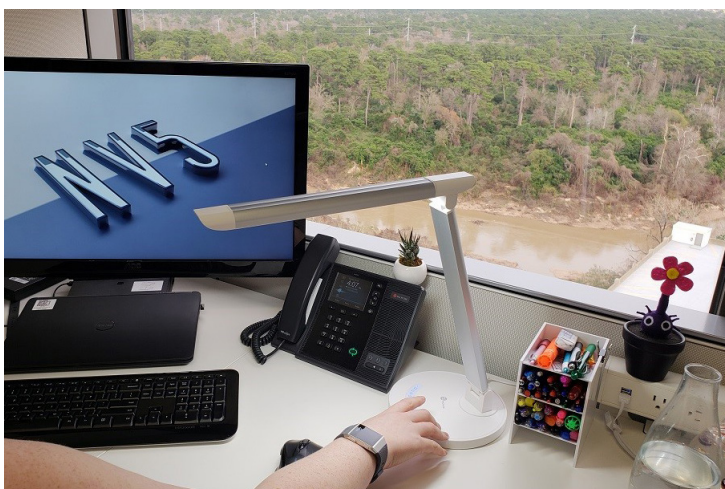
## THOUGHT LEADERSHIP

### WELL: A Market Differentiator for Building Owners

Healthy buildings have been around for a long time, thanks in large part to many organizations and programs supporting sustainability best practices and making us more aware of indoor environmental quality. Today, we have even more data to support how indoor environments impact human health—and WELL has proven to be one of the most successful programs to enact change in this area.

WELL is the world’s first whole-building design tool focused exclusively on improving building occupants’ comfort and well-being. Daily exposure to indoor environments is high, but many individuals don’t realize that buildings—and everything in them—impact human health and wellness.

“There is a growing awareness and body of scientific evidence that indoor, built environments can affect human health and well-being, with the perception often being that indoor environments have a negative impact on health,” says Brent Bauer, M.D., medical director of the Well Living Lab, a research facility dedicated to creating healthier indoor spaces. Findings from the U.S. Environmental Protection Agency show that on average people are outdoors for about 2.5 hours each day—which means they spend about 90 percent of their time inside, mostly in their homes or occupational spaces.



#### WELL Feature-LIGHT: CIRCADIAN LIGHTING DESIGN

At NV5 Houston we use the TaoTronics Lamps at employee desks. This gives five modes of control.

While both LEED and WELL are focused on indoor air quality, we also need to consider what happens outside of the building. Air from the outside that we are bringing in, for instance, can carry pollutants that may be detrimental to our health. Polluted air is the number one environmental cause of premature mortality worldwide, reports the Institute for Health Metrics and Evaluation.

According to a 2016 report by Research America, physical inactivity is linked to obesity, chronic heart disease disorders, and over 10 percent of deaths in the U.S. Lack of gross motor movement indoors contributes to these alarming statistics, which is why WELL also focuses on incorporating “activating” spaces (stairs, parks and plazas, amenity decks, fitness areas, etc.) into design plans.

IWBI has built a dynamic program that positions building design and construction professionals as agents of public health. Architects understand how good building design can change the way a person lives, behaves and, possibly, their aspirations. Many industry professionals are starting to connect with WELL—there are new generations of designers who are excited about getting involved with this new way of thinking and designing. This enthusiasm centers on how architecture—through engineering and science—can be transformative and lifechanging, which are great motivators.

### \$4 Trillion Wellness Industry Drives Green Building

The WELL paradigm leverages the power of buildings to make our bodies healthier, our minds more calm and focused, and our productivity greater. In its “World Green Building Trends 2018 SmartMarket Report,” Dodge Data and Analytics ranks occupant health enhancements as the top social driver for green building, followed by the promotion of sustainable business practices and improved worker productivity.

“With more and more people demanding and expecting healthier places to live and work, more and more leaders around the globe are committing to green building, which is now a trillion-dollar industry,” says Mahesh Ramanujam, president and CEO of USGBC. These “leaders” consist of many different groups, including building owners desiring tenants who are interested in wellness initiatives.

Here are a few reasons why businesses and other organizations seek WELL certification:

- Demonstrates industry leadership
- Enhances tenant experience and retention
- Holistic building standards promote health and well-being of building occupants
- Improves employee recruiting and retention
- Familiarity with sustainability components—WELL principles overlap with well-known LEED standards by about 30 percent
- Market differentiator—WELL Building is expected to become the “new Class A”

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*The Global Wellness Institute reports that the global wellness industry grew 12.8 percent between 2015 and 2017, from \$3.7 trillion to \$4.2 trillion. The real estate wellness market—valued in 2017 at \$134 billion—is experiencing rapid growth, and the worth of the workplace wellness market climbed to \$47.5 billion.*

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Everyone would like to make this world better and more positive, but at the end of the day, businesses are driven by the bottom line. Employers, for example, have to make decisions based upon how they’re going to pay their staff and make a profit. With WELL, businesses can show their commitment to employee wellness by designing spaces that maximize performance and productivity, reduce the impacts of absenteeism, and facilitate healthier decision-making.

For property owners and managers, high-quality tenants help to maximize financial performance of rental rates and resale value. In this market, tenants are the primary ones vying for healthier indoor solutions and work communities. To remain competitive, property owners and managers are looking for new ways to stay edgy and provide value to building occupants.

At NV5, our commitment is to deliver engineering solutions for our clients to improve lives. For our many clients we see WELL Building as a market differentiator—the “new Class A”

for building owners and developers and organizations that want to provide the best places to live and work. For new and existing buildings, it is the right thing to do for our colleagues, friends and families, and future generations.

### The Elephant in the Room

There are still a few who are skeptical about accepting WELL, which is largely due to cost concerns and—for existing buildings—the base building compliance challenges. However, we recommend getting an estimate through the latest version of the program, WELL v2™, as the cost has been reduced considerably. Also, the program now has fewer “preconditions” and adjustments made to building “optimizations” are more practical. It’s time to take a second look.

### WELL 2.0: Recent Program Changes Provide Greater Flexibility in Building Design

To make WELL Building Standards more customizable and applicable to a broader range of building types, in May 2018, IWBI rolled out its second version of the program—WELL v2™. This latest adaptation incorporates key learnings from hundreds of WELL projects, as well as the diverse perspectives of representatives from more than 190 organizations.

One noteworthy change is the restructuring of core concepts. Sound, Materials and Community were added to the mix, and Fitness and Comfort were reclassified as Movement and Thermal Comfort. The Sound category concentrates on acoustics, while Materials focuses on identifying and reducing occupants’ exposure to hazardous materials. The Community concept emphasizes social equity, civic engagement and accessible design methodologies.

The scoring system was also simplified by moving away from a fixed scorecard and removing half of the preconditions required for precertification. These changes give project teams more flexibility to focus on optimizations that reflect project wellness goals and interests.

### Elevated Synergy Enhances Success

WELL is a “living” program, constantly evolving and adapting to meet the needs of consumers and industry demands. Changes are also spurred by technological advancements. Some of today’s innovations in the health and wellness sector consist of smart sensors that monitor air quality, wearable devices that track health data, and circadian rhythm lighting systems to help people sleep better.

To keep up with the changing times, WELL-certified buildings have to be regularly updated and tested. This process is simplified when you work with an interdisciplinary team of engineers, architects, construction/program managers and environmental professionals who can bring effective solutions to the table with speed and proficiency. This style of operation is what makes NV5 most successful in facilitating WELL.

As a global provider of professional and technical engineering and consulting solutions, NV5 employs sustainable and Well Building design practices across all project types to optimize infrastructure and challenge traditional code compliance design approaches. Our firm is uniquely positioned to help clients at all stages of a project—from conception, design and construction to testing, certification and operations.

We love the science side of constructing buildings, and we’ve learned there is much more than “measuring and improving” to optimize facility performance. It’s about the human factor too.

If you’re looking for ingenuity in advancing human health and wellness, consider implementing WELL Building Standards on your next project. For more information, visit [NV5.com](http://NV5.com).

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Kathy Collins serves as a Director of Sustainability at NV5. She is a licensed architect in both Texas and Illinois, and is accredited in LEED AP O+M, BD+C as well as WELL AP. At NV5, her responsibilities include projects involving energy and sustainability, resiliency and wellness. As part of her industry commitment, Kathy has educated thousands of building design and construction industry professionals in preparation for becoming LEED and WELL accredited.