Property Health and Wellness ROI Model WELL New & Existing Office Buildings Model Documentation

Working Draft

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The Muldavin Company Disclaimer

The Property Health and Wellness ROI Model for New and Existing Buildings Documentation and Excel Financial Model (collectively, the "Property Health and Wellness ROI Model") are provided by The Muldavin Company, Inc. for informational purposes only. The Property Health and Wellness ROI Model is provided "as is" without warranty of any kind, express or implied.

The Property Health and Wellness ROI Model methodology was created by Scott Muldavin, President of The Muldavin Company, based on research publications over the past 10 years. This document is intended to provide investors with a model framework that they can adapt/modify for their own use in conducting financial due diligence on health and wellness related building investments. The model and methodology can also be adapted to evaluate the applicability of health and wellness decisions at the portfolio level.

Use of the Property Health and Wellness ROI Model is at the user's own risk, and the user is solely responsible for its use thereof or reliance thereupon. It is up to you, your consultants, general contractors, architects, designers, engineers, and other members of your project team to review your property and to evaluate the potential costs, benefits, and feasibility of implementing any health and wellness related property investment.

While the Property Health and Wellness ROI Model can be adapted for use with any health and wellness related property investment, this document focuses on the analysis of the WELL Building Standard for Office New and Existing Buildings.

Introduction

The WELL Building Standard[™] can generate substantial physical, mental and social health benefits for building occupants, as well as substantial financial benefits to their employers.

The financial implications of lost worker productivity due to poor health and wellbeing are particularly alarming, and costly, for businesses. According to research by Gallup, approximately 70% of US workers, and 87% of global workers are not engaged at work and companies in top quartile are 22% more productive—indicating substantial room for most companies to improve their productivity.¹

The Property Health and Wellness ROI Model enables users to input their assumptions on key model variables to quantify the projected financial performance that could result from implementing the WELL Building Standard™ for New and Existing Office Buildings (combines Core & Shell and Interiors certifications for those companies who own and occupy their properties). The Property Health and Wellness ROI Model can also be modified to provide insight about potential results on a portfolio level. Users should adapt or modify the model methodology to meet their specific property/project situation.

Finally, it is always good to present alternative ways to think about the financial basis of an investment. For example, one of the most compelling ways to think about the financial benefits of the WELL Building Standard is to compare growing investment in health and wellness incentive programs, averaging around \$700 per person per year², against a one-time investment of approximately \$100 to \$400 per person to implement the WELL Building Standard.³

¹ US Employee Engagement Unmoved at 31.9%, Employee Engagement, Gallup Website, July 9th, 2015.

² Fidelity Investments 5th Annual Wellness Survey, National Business Group on Health, March 26th, 2015.

³ This is a cost estimate range provided by Delos (April 2017) that includes registration, certification, verification, consulting and hard costs for buildings that certify both their core and shell and interiors. Costs will vary and could potentially be outside the identified range depending on a project's specific situation, the level of WELL Certification, and other factors.

The Property Health and Wellness ROI Model Overview

The Property Health and Wellness ROI Model for New and Existing Buildings compares the estimated total costs of implementing the WELL Building Standard™ with potential financial benefits from the following value elements:

- 1. Health cost savings: organization
- 2. Worker productivity increases
- 3. Recruiting and retention cost savings
- 4. Reduced absenteeism
- 5. Customer Access and Sales
- 6. Enterprise Risk Reduction

Increased worker productivity is the most important value element driving financial performance from WELL implementation. Recruiting and retention benefits can also be substantial and may be an important driver behind a decision to apply for WELL Certification. Reduced absenteeism may also deliver measureable benefits. Health cost savings can become important over time for companies whose costs are tightly tied to the health of their workforce.

Customer access and sales and enterprise risk reduction also offer compelling arguments in support of WELL Certification that supplement the more detailed financial analysis of the first four "value elements." While the implications of the WELL Building Standard on these value elements can be quantified⁴, they are presented in this document to enable user to provide additional qualitative arguments in the context of an investment committee review.

Using the Property Health and Wellness ROI Model

The Property Health and Wellness ROI Model enables users to perform calculations to estimate the Return on Investment (ROI) and Net Present Value (NPV) of a proposed investment in WELL New and Existing Buildings Certification on a specific property/space. It can also be adapted for use in considering portfolio level strategies. The Property Health and Wellness ROI Excel Financial Model for New

⁴ A detailed illustrative example of how to quantify these value elements is presented in "How to Calculate and Present Deep Retrofit Value for Owner Occupants, Scott Muldavin, et al, Rocky Mountain Institute, 2014. (Available at www.muldavin.com/publications)

and Existing Buildings that is documented in this paper is available in a separate Excel file: contact Scott Muldavin to access this file.

The Property Health and Wellness ROI Model has been designed to perform calculations based on assumptions and inputs provided by users. Users will have to make their own determinations about proper assumptions based on their research, specific health and wellness investments, and the circumstances and details of their project, employees, and company. It is also expected that many users will adapt the framework and model as necessary to fit their specific situation.

Consistent with traditional real estate analysis, the use of ranges and sensitivity analyses are recommended when evaluating the financial effects of key model assumptions like productivity increase, turnover reduction, implementation cost and other assumptions. This will provide users with a better understanding of the financial dynamics of health and wellness investments.

To assist in the identification and access to research that might be helpful in determining some of the key model assumptions so users may do their own due diligence on the quality and applicability of research to their project, a separate document has been created titled: "Financial Support for Sustainability and WELL Building Standard Decisions". Please contact Scott Muldavin to access this document.

Financial Returns from Hypothetical Bank Financial Analysis

For illustrative purposes, the Property Health and WELLness ROI model has been implemented on a hypothetical 200,000 square foot office building occupied by a financial institution. The building owner has 1000 employees in the building being compensated, on average, a \$100,000 per year. Definitions and assumptions for health costs, turnover rates, recruiting costs, absenteeism and other variables are discussed in more detail, along with full documentation of the model, in this document as well as in the separate Property Health and Wellness ROI Model Excel Spreadsheet file.

Cost assumptions for WELL Implementation are estimates based on discussions with professionals experienced in WELL Building Standard certification execution. It was assumed that the building owner obtains a WELL Building Standard New and Existing Building Certification—which is the most expensive because it combines

building interventions in both the Core & Shell and Interiors. This certification is only available to building owners that occupy their buildings. Costs will of course vary significantly depending on the level of certification and many other project/company specific factors.

Sensitivity Analysis and Results

Given the critical role of productivity increases to return on investment, the sensitivity analysis focuses on the sensitivity of returns and value due to changes in the assumed percentage productivity increase:

Low Case: 0.5%Base Case: 1.5%High Case 2.5%

The appropriate level of productivity increase to use for your project will depend on many factors. A short discussion of the selection of an appropriate productivity increase for your project is addressed in the "Worker Productivity" section of this document. A summary of some of the key building interventions and productivity related research is presented in a separate document: "Financial Support for Sustainability and WELL Building Standard Decisions".⁵

The results as transparently documented and presented in the Excel spreadsheet demonstrate the extremely strong returns and value enhancement for companies that invest in the WELL Building Standard:

- 0.5% Productivity Increase: IRR=298%; NPV= \$5.6 million
- 1.5% Productivity Increase: IRR=527%; NPV= \$ 9.6 million
- 2.5% Productivity Increase: IRR=758%; NPV= \$13.7 million

The model is described and documented below.

⁵ This document is available by request from Scott Muldavin.

1. Health Insurance Cost Savings: Organization

Employee health and well-being are critical to business success. Approximately 68 percent of full-time employee's report having a chronic condition. The Centers for Disease Control and Prevention (CDC) confirms that chronic conditions are some of the most common and costly of health problems; however, they are also some of the most preventable.⁶

Health insurance premiums are a burden for companies and employees. Family coverage premiums have increased over 60 percent between 2005 and 2015 to \$17,545, while employee contributions have increased 83 percent over the same timeperiod to \$4,955.⁷ With 2016 per person health costs in the US over twice most European economies, and nearly three times the OECD average, company health costs burden business profits.⁸

The WELL Building Standard™ was created specifically to address health and well-being by providing a scientifically-based approach to the design, construction and operation of a building. Building interventions in air, water, light, nourishment, comfort, fitness and mind provide a solid foundation for potential improvements in the health and well-being of employees.

Model Documentation for Health Insurance Cost Savings

- Health Insurance Premium per Employee
- Share Covered by Employee
- Total Employer Healthcare Spend
- Health Insurance Premium Reduction (%)
- Total Healthcare Cost Savings

⁶ Centers for Disease Control. The Power of Prevention Chronic disease . . . the public health challenge of the 21st century. CDC. http://www.cdc.gov/chronicdisease/pdf/2009-Power-of-Prevention.pdf. Accessed April 11, 2016.

⁷ Claxton G, Rae M, Long M, Panchal N, Damico A. Employer Health Benefits: 2015 Annual Survey. Kaiser Family Foundation. http://files.kff.org/attachment/report-2015-employer-health-benefits-survey. Accessed April 11, 2016.

⁸ Organization for Economic Cooperation and Development, Health Statistics, 2016; compiled by Peter Peterson Foundation June 2016. OECD includes 35 countries, including most highly developed economies. (http://www.pgpf.org/chart-archive/0006_health-care-oecd)

Health Insurance Premium per Employee

Combined spend of employee health insurance premiums for all employees divided by number of employees. Details should be available from human resources. The 2016 average US employer health care premiums for families were \$18,142 and for singles \$6,435.9

Share Covered by Employee

Percentage representing the average share of health insurance premiums covered by the employee. This will vary by company, though the national average for 2016 was 29.0 percent.¹⁰ Exact figures for your company should be available from human resources.

Total Employer Healthcare Spend

Combined spend on health insurance premiums attributed to employer.

Health Insurance Premium Reduction (%)

This assumption is difficult to estimate due to significant variation across companies and providers, and lack of long-term historical data for WELL Certified offices. Specific guidance should be discussed with experts inside the company or with outside advisors who assist with health insurance. It is likely that any cost savings would grow over time as potential health benefits accumulate.

Health insurers might be influenced by the substantial number of WELL interventions that are preventive in nature¹¹ – including a range of fitness, mind, ergonomic, and nourishment features that have the potential to positively impact employee health and well-being. Many of the interventions are also passive in that they do not require employee action to realize potential benefits.

Total Healthcare Cost Savings

⁹ 2016 Employer Health Benefits Survey, Kaiser Family Foundation. (http://kff.org/healthcosts/report/2016-employer-health-benefits-survey/)

¹⁰ Ibid.

¹¹ Centers for Disease Control. Benefits of health promotion programs. CDC. http://www.cdc.gov/workplacehealthpromotion/businesscase/benefits/. Accessed April 11, 2016

Total healthcare savings is calculated by multiplying the total employer healthcare spend by the health insurance premium reduction percentage.

2. Worker Productivity

Building design, operation and policies can have a profound impact on improving productivity. Building problems such as inadequate lighting, poor air quality and high noise levels are often combined with company policies and culture that lack emphasis on health and well-being, or do not assist employees in managing chronic disease or work stressors.

The WELL Building Standard[™] has strong potential to improve productivity because so many of its interventions directly address key factors influencing health and productivity. However, attribution of productivity increases to the WELL Building Standard, versus other factors, is difficult. Fortunately, the attribution analysis required is consistent with what real estate analysts do regularly in estimating rents, occupancies, tenant retention, absorption or other variables in a standard real estate financial analysis.

The process followed by real estate analysts relies on analysis of a broad cross-section of data from different sources, all of which require subjective adjustment and application by the analyst based on their assessment of its quality and applicability to their project. Estimating how much the WELL Building Standard increases worker productivity follows a similar approach.

Fortunately, there is substantial research about how building interventions identified in the WELL Building Standard affect productivity. Some of the important research necessary to determining these key assumptions are available in a separate document: "Financial Support for Sustainability and WELL Building Standard Decisions"¹³.

This section presents the documentation of the financial model for the calculation of worker productivity cost savings presented in the Property Health and Wellness ROI Model.

¹² See "Financial Support for Sustainability and WELL Building Standard Decisions", Scott Muldavin, The Muldavin Company, April 2017.

¹³ Ibid—contact Scott Muldavin if you want a copy of this document.

Model Documentation for Worker Productivity

- Total Salaries + Benefits
- Productivity Increase (%)
- Total Productivity Gains

Total Salaries + Benefits

This number represents the total financial outlay for salaries and benefits of the employees who work in the space that is being WELL Certified.

Productivity Increase (%)

The estimate of the percentage productivity increase of employees in the space that can be attributed to the implementation of the WELL Building Standard^{TM}. Use of a range is recommended.

Total Productivity Gains

This number represents total productivity-related employee cost savings attributed to the WELL Building Standard™ in an existing or proposed space.

While the term employee cost savings is used for the savings resulting from productivity, an alternative way to think about the cost savings estimate is to interpret it as a proxy calculation for the value of increased output (more products, sales, revenues) that would result from workers producing more and being happier in their work environment. In this regard, any potential benefits from the WELL Building Standard™ could begin immediately after it is implemented.

Further, since companies are in the business of generating revenue at multiples of salary (to pay other costs and make profits), one could also reasonably assume productivity benefits might exceed the approach used that to relies upon employee cost savings as a proxy.

3. Recruiting and Retention Cost Savings

Recruiting and retaining employees is costly for many businesses, particularly for those requiring top tier or specialized talent. Replacing employees that leave requires significant staff time to recruit, interview and train new staff. New employees also have long ramp-up times before they become as productive as their predecessors.

In addition, retaining existing staff requires investment to maintain the firm's reputation, create an engaging culture in the workplace and maintain competitive compensation packages.

The WELL Building Standard[™] can play a significant role in fostering a great work environment, culture of caring and enhanced reputation which is critical to recruiting and retention.

Model Documentation for Recruiting and Retention Savings

- Annual Turnover Rate (%)
- Average Recruiting Costs Per Employee (% of Comp)
- Total Employee Recruiting Costs
- Reduction in Turnover (%)
- Total Recruiting Cost Savings (\$)

Annual Turnover Rate (%)

This number represents the percentage of employees who voluntarily leave the organization (voluntary turnover).

While turnover varies dramatically by organization, voluntary turnover rates in 2014 averaged 11 percent (15.7 percent for all turnover) according to CompData survey data.¹⁴

Voluntary turnover rates for Banking and Finance were 13.3 percent, Services at 8.6 percent, Healthcare at 13.0 percent and Hospitality at 20.2 percent.¹⁵ Many companies in the Fortune 500 have much higher rates of turnover.

Average Recruiting Costs Per Employee (% of Comp)

Avg. Employee Salary * Avg. Cost of Recruiting (% of Salary)

Bares A. 2014 Turnover Rates by Industry. Compensation Force. http://www.compensationforce.com/2015/03/2014-turnover-rates-by-industry.html. Accessed April 11, 2016.

Bares A. 2014 Turnover Rates by Industry. Compensation Force. http://www.compensationforce.com/2015/03/2014-turnover-rates-by-industry.html. Accessed April 11, 2016.

The average cost of recruiting per employee accounts for both the cost of hiring a new employee as well as the productivity ramp-up time required and other costs. Some of the costs of losing an employee that need to be taking into consideration include:

- The cost of hiring a new employee including the advertising, interviewing, screening, and hiring.
- Cost of onboarding a new person, including training and management time.
- Lost productivity—it may take a new employee one to two years to reach the productivity of an existing person.
- Lost engagement—other employees who see high turnover tend to disengage and lose productivity.
- Customer service and errors—for example new employees take longer and are often less adept at solving problems.
- Training cost—for example, over two to three years, a business likely invests 10 to 20 percent of an employee's salary or more in training
- Cultural impact—whenever someone leaves, others take time to ask why. 16

As you might expect, there is a wide range of estimates of the cost of turnover. A study by the Center for American Progress estimated costs of around 20% of salary for jobs under \$50,000 and up to 213% of salary to replace a \$100,000 CEO.¹⁷ A widely cited study from the Society of Human Resources indicates cost of replacing an employee around 6 to 9 months of replaced worker's salary.¹⁸

Total Employee Recruiting Cost

= Total Employees * Annual Turnover Rate * Avg. Recruiting Cost Per Employee

Reduction in Turnover (%)

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¹⁶ Employee Retention, Now a Big Issue: Why the Tide has Turned, Josh Bersin, Deloitte, August 16, 2013.

¹⁷ "There are Significant Business Costs to Replacing Employees, Heather Boushey and Sarah Jane Glynn, Center for American Progress, November 16, 2012.

¹⁸ Minimize the Cost of Employee Turnover, Hire a Virtual Assistance, Recruiter.com, March 3, 2017.

This number is estimated by evaluating the importance of the workplace environment and an organization's reputation for caring about their employee's health and wellbeing generally to employee voluntary turnover.

Workers are favorably predisposed to companies that make employee health and well-being paramount. The WELL Building Standard™ and its health and wellness features are highly visible to building occupants, and accordingly, convey strong messaging as to an employer's priorities. Key research and citations can be found in the separate document: "Financial Support for Sustainability and WELL Building Standard decisions.

Total Recruiting and Retention Cost Savings (\$)

= Reduction in Annual Turnover Rate * Total Employee Recruiting Costs

4. Reduced Absenteeism

Model Documentation for Reduced Absenteeism

- Total Salary + Benefits of Employees
- Designated Work Days per Year
- Total Employees Cost per Day of Absence
- Absences per Employee
- Reduction in Absences (%)
- Total Absenteeism Cost Savings

Total Salary + Benefits of Employees

This number represents the total financial outlay for employee salaries and benefits and is typically obtained from human resources.

Designated Work Days per Year

This is the total number of workdays after subtracting weekends and holidays – typically around 250 days.

Total Employee's Cost per Day of Absence

Absences per Employee

This number represents the average number of days absent per employee per year and is typically obtained from human resources. The average absences from the Bureau of Labor Statistics, Current Population survey from 2015 was 2.9%.

Reduction in Absences (%)

Reduction in Absences is defined as the estimated percentage reduction in absences attributed to the WELL Building Standard's[™] health and well-being impact.

There is a growing body of evidence supporting the relationship between healthier indoor environments and reduced absenteeism. Some of the key research citations can be found in "Financial Support for Sustainability and WELL Building Solutions".

5. Customer Access and Sales

There is growing evidence that companies that focus on the health and well-being of their employees can increase customer access and sales:

- Employee Engagement: Companies with healthier work environments and a culture of caring can expect more satisfied and engaged employees to produce better products and sell more effectively.
- **Customer Access**: Healthy buildings are becoming a more important part of both a company's reputation and also its sustainability ratings, contributing to higher ESG scores that have become a minimum standard for many government and private organizations.
- New Products and Markets: Companies that promote health and well-being in their culture and work environments integrate their employees at a very personal level in the trillion-dollar health and wellness market, providing a

basis for product and marketing innovation. health.¹⁹ This growing opportunity mirrors the "sustainability" opportunity companies are integrating into their businesses.

Presentation of the arguments and evidence, even without explicit quantification can be very compelling to decision-makers. Quantification at the property/space level is difficult because it can be subjective to attribute company revenues to people in a space/building, but quantification at a portfolio level does not have this challenge, making this "value element" particularly powerful in making portfolio level decisions to pursue WELL Building certification. A full financial assessment of Customer Access and Sales is presented in "How to Calculate and Present Deep Retrofit Value for Owner Occupants" The model is documented below.

Model Documentation for Customer Access

- Annual Revenues
- Revenue Increase (%)
- Profit Margin (%)
- Earnings Increase
- Earnings Multiple
- Enterprise Value Increase

Annual Revenues

Revenue attribution to a single geographic location can prove difficult for firms with hundreds of locations, thus estimating Annual Revenue is somewhat nuanced. While some firms do track per office revenue, the easiest alternative method to estimate per property revenues is to directly correlate revenue to employee count at that location (i.e. Location A has 10% of a firm's employees, thus 10% of firm-wide revenue attributed). Nevertheless, the attributed revenue % can be adjusted depending on the relative importance of the employees in a specific location (is it back office or the headquarters?).

¹⁹ "Healthy, wealthy and (maybe wise): The emerging trillion-dollar market for health and wellness", Consumer and Market Insights, May 2012, McKinsey and Co.

²⁰ "How to Calculate and Present Deep Retrofit Value for Owner Occupants" Scott Muldavin, Rocky Mountain Institute, 2014. Document can be found at www.muldavin.com/publications.

Revenue Increase (%)

This number is an estimate of potential revenue increase percent that will be applied to the portion of annual revenues attributed to the space being WELL certified.

Profit Margin (%)

This is the profit margin for the company/business unit in the space being WELL certified. Profit margins by industry sector are published, however, this number is best obtained internally from the company.

Earnings Increase

= Total Revenue Increase * Profit Margin

Earnings Multiple

Earnings multiples are market derived based on sales transactions. Data sources by industry/company type are available at a number of sources:

BIZCOMPS® Business Sales Statistics

✓ Small Business Valuation Multiples

Pratt's Stats® - Private Company Mergers and Acquisitions Database

BizBuySell Insight Reports

IBA Market Database

ValuSource Mid-Market Comps

Enterprise Value Increase

= Earnings Increase * Earnings Multiple

6. Enterprise Risk Reduction

The purpose of evaluating enterprise risk is to document how investment in health and wellness, and the WELL Building Standard certification specifically, can manage and mitigate enterprise risk. Lower enterprise risk translates directly into value by increasing how the market values the profits of businesses—which is reflected in lower price/earnings multiples.

The WELL Certification can significantly contribute to mitigating some of the most pressing business risks facing companies today, including low productivity and engagement of employees, retention of key staff, health cost escalation, access to customers, product innovation, and the overall brand of the business.

While the value benefit of reduced enterprise risk can be quantified by estimating potential risk reduction and implications on price-earnings multiples, we recommend that due diligence analysts at least include analysis and commentary on potential enterprise risk reduction and value implications as part of the overall presentation of the financial results quantified in the Property Health and Wellness ROI Model. An example of how to quantify the value of Enterprise Risk Reduction can be found in "How to Calculate and Present Deep Retrofit Value for Owner Occupants".²¹

As with the Customer Access "value element", some of the difficulties of quantifying the implications of Reduced Enterprise Risk on value in a single property/space are much reduced when considering implementation of WELL at a portfolio level. This is primarily due to not having to attribute the amount of enterprise risk reduction contributed by implementing WELL on a single property/space.

Some of the arguments and data supporting how WELL Building certification can reduce enterprise risk are summarized below.

17

²¹ "How to Calculate and Present Deep Retrofit Value for Owner Occupants, Scott Muldavin, et al, Rocky Mountain Institute, 2014. (Available at www.muldavin.com/publications)

7. WELL Building Standard Implementation Costs: New and Existing Buildings

The cost of implementation of the WELL Building Standard™ can vary significantly based on the size of the space being certified, as well as numerous other factors including the age of the building, the level and type of existing or planned improvements, prior green building certification, current occupant health and wellness policies and practices, and other factors.

Pricing for WELL Certification (registration, performance verification, and certification) and Recertification is can be found on the International WELL Building Institute's website (http://www.wellcertified.com/well-pricing). The pricing is tightly tied to property/space size and type of certification. A pricing calculator is available to assist investors and their service providers.

WELL Building Certification costs include WELL Certification Fees, WELL Consulting & Other Professional Fees, and initial one-time hard costs. There are also minimal costs for operations, policy changes, and recertification.

A general range of total WELL Building Standard implementation costs for a 200,000-square foot silver New & Existing Office Building certification would be in the range from \$1.50 to 2.20 per square foot. Certification fees paid to IWBI would be approximately \$0.51 per square foot. (Calculator available at IWBI website). Hard costs in many cases are very minimal. Costs will vary outside of ranges for some projects.²² Costs for implementing the WELL Building Standard for New and Existing Interiors would be lower in the range of \$1.00 to \$1.50 per square foot.

It is important to understand when thinking about costs, that cost estimates can vary if estimators cost out all potential interventions, rather just those interventions required for certification. In some cases, some of the "optimizations" required to

²² Rough cost estimate provided by professionals experienced in WELL execution in March 2017 for a 200,000-square foot silver WELL New & Existing Building certification. Costs will vary based on many factors including property size, certification level, age, existing green certification level, and numerous property/project specific variables. Consultation with WELL cost professional regarding your specific project is advised prior to any decision-making.

achieve gold or platinum certification may be costly. It is also important to not compare LEED and WELL certification fees directly because the WELL certification fees paid to the IWBI include substantial performance verification, which is typically paid as a "commissioning" consulting fee when implementing LEED. Additionally, in many cases implementation may include "Alternative Adherence Paths" which can often overcome potentially costly interventions.

Model Documentation of WELL Implementation Costs for New & Existing Buildings

Certification Fees
Recertification Costs
Consulting Costs
Hard Costs/SF
Total Hard Costs
Total Initial Costs

Certification Fees

Certification fees include registration fees, performance verification fees, alternative adherence path fees (optional), and certification fees and fees for certain services, such as alternative adherence pathway requests, curative actions, and appeals, as detailed on the IWBI website referenced above. Unlike LEED, certification fees for WELL include a large component of actual performance verification.

For a typical 200,000 square foot project²³ (New & Existing Building Certification—includes Core & Shell & Interiors), certification fees would be around \$ 0.51 per square foot (Accessed March 2017 from IWBI website).

Recertification Costs (check latest fees on IWBI website)

Recertification occurs at the end of the third year. Recertification costs on a typical 200,000 WELL silver New & Existing Building Certification are estimated to be about \$0.30 per sq. foot²⁴. During recertification, projects may submit additional WELL Features to improve their score or achieve a higher level of certification.

²³ Ibid

²⁴ Ibid

Consulting costs include all third-party fees, to consultants, architects, engineers, consultants, or other specialists that may be involved in both the initial scoping and decision-making as well as execution. These costs (sometimes referred to as "soft" costs, are highly variable depending on the specific project situation—and ranges are suggested in preliminary decision-making. There are often strong scale and experience economies with these fees as policies are put in place and internal and external people working on the implementation become more experienced.

Hard Costs/SF

Hard costs include all costs for construction, products and materials, furniture, and other expenditures to implement the proposed plan. Hard costs can vary significantly, but are often relatively limited.

Total Hard Costs

Total hard costs are simply the product of the hard costs per square feet times the square feet of the property/space being certified.

Total Initial Costs

This is the sum of certification, recertification, consulting and hard costs.

Operational and Organizational Costs

Incremental WELL related operational costs are difficult to estimate, but an assumption of \$2,000 per month is plausible. In addition, there are a variety of policy related changes included in WELL implementation. These are also highly variable and difficult to estimate, but an annual cost of \$50,000 per year--\$500 per employee—for a 1000-person company is plausible.²⁵



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²⁵ Ibid