

Using Appraisal and Valuation to Achieve Transformation in Commercial Buildings

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ABSTRACT

Commercial building owners have made strides in efforts to incorporate green and high-performance attributes into their buildings, improving design, construction, and marketing to reflect consumer demand and their own sustainability mandates.¹ In spite of these investments, owners, including those in leading markets, have lagged in their ability to attribute value to green and high-performance building attributes in the valuation process. In order to capture the value of high-performance buildings, owners must make methodological changes to their collection of building performance data and learn to better communicate these metrics to third-party appraisers and lenders. Building this feedback loop is crucial in order to promote increasingly deep investments in green and energy efficient attributes, as the commercial retrofit market can only move as fast as owners (and appraisers) can assign value to these efforts. A recently released appraisal primer by the Institute for Market Transformation (IMT) and the Appraisal Institute (AI) addresses this gap by focusing on equipping owners to collect data on high-performance building attributes for internal valuation and use by third party appraisers. The guide, created with input from leading commercial real estate stakeholders, appraisers, and lenders identifies four areas of value: income, vacancy, operating expenses, and risk. The guide further explains how owners can build a value narrative for high-performance building investments by collecting crucial information on their assets that distinguish these buildings from conventional peers, and how these attributes can be best communicated to lenders and appraisers.

Project Background

IMT and AI's guide "Green Building and Property Value: A Primer for Owners and Developers" was created in recognition of the need for building owners and lenders to provide demand and essential performance data for green appraisals. At present, resources available to the appraisal industry on green valuation currently outstrip what is available to the commercial real estate and lending communities. IMT, AI and other groups such as the Rocky Mountain Institute (RMI) have developed a variety of resources for appraisers (Chao 2012) and commercial real estate professionals (Muldavin 2010, 2013) which provide detailed guidance for these groups on how to account for green and energy efficient building attributes. The Appraisal Institute, the leading membership organization for the industry, has developed a four-part education track of green courses, including: an introduction to residential and commercial valuation, as well as stand-alone sessions on solar valuation and case studies. Additionally, the Appraisal Foundation, a congressionally-chartered body which sets appraisal standards and qualifications for the industry, has updated the Uniform Standards of Professional Appraisal Practice (USPAP) to take into account green attributes. The Foundation is also currently studying green appraisal practices through its Practices Board.

¹This paper acknowledges the distinction between "green" and "high-performance" building attributes but for simplicity makes no attempt to differentiate between the two.

For their part, participation of building owners in securing green appraisals is crucial, as they are in a position to demand green appraisals, and must come prepared to the appraisal process with assembled performance metrics on green and high-performance building attributes. In concert with owners, lenders also play an important role in market demand for green appraisals, as they commission and review appraisals in the context of sale and refinance, and can set standards for appraiser scope and qualifications. Although in-depth resources now exist for owners and lenders on how to assign value to green buildings in internal valuation and underwriting (Muldavin 2010, 2013) strategic guidance for owners and developers on how to interact with lenders and appraisers is lacking. Through its publication, IMT and AI sought to address this market gap. Interviews were conducted with commercial real estate market stakeholders, including leading building owners, appraisers, and lending institutions. This research identified an outline of critical areas where green value can be assigned and describes how owners can work with lenders and appraisers to communicate the value of green and high-performance features.

Four Components of Value

In conversations with industry leaders, research showed appraisal value for green and high-performance attributes could be assigned in four critical areas. These included: revenue, occupancy, operating expenses, and risk. These categories are also familiar to property owners as components of a standard financial operating statement.

Revenue

Increased revenue from rental premiums in green commercial buildings is the first value component outlined in the guide. Commercial property owners and developers investing in green features were generally positive on the ability of green features to improve marketability and rents, but the results were anecdotal. Owners cited changing attitudes of tenants in multifamily and office markets, and in particular a willingness of office tenants in leading markets to pay a rent premium for green space. For these tenants, leasing green space is an opportunity to demonstrate a commitment to sustainability, attract the best employees, and improve productivity. Owners pursuing certifications, including LEED, ENERGY STAR, and National Green Building Standard (NGBS), reported higher rental income attributable to both many required features and the certification itself. According to appraisers interviewed, those owners not pursuing certifications have also realized positive value adjustments from investments in green features in “brown” buildings by improving rents and better positioning assets within the spectrum of other properties in a marketplace. To improve appraisal value, owners are encouraged to bring documentation of rent premiums in their buildings as they compare to similar assets. The report also recommends that in some cases valuation professionals can assist owners prior to retrofits in these buildings by assessing whether investments are truly a green “premium” or necessary retrofits to keep up with market trends and competitors.

Recent studies for commercial office buildings provide some statistical evidence on the reported premium for green building rents and occupancy. Figure 1, below, summarizes several major studies, which showed higher rents in Energy Star and LEED-certified buildings. Although these studies show evidence of the value of certifications, additional studies will benefit from the larger cohort of certified buildings now in operation. Additionally, future studies

might examine the relationship of observed energy performance (now available as a result of disclosure policies) with leading real estate metrics, including rents.

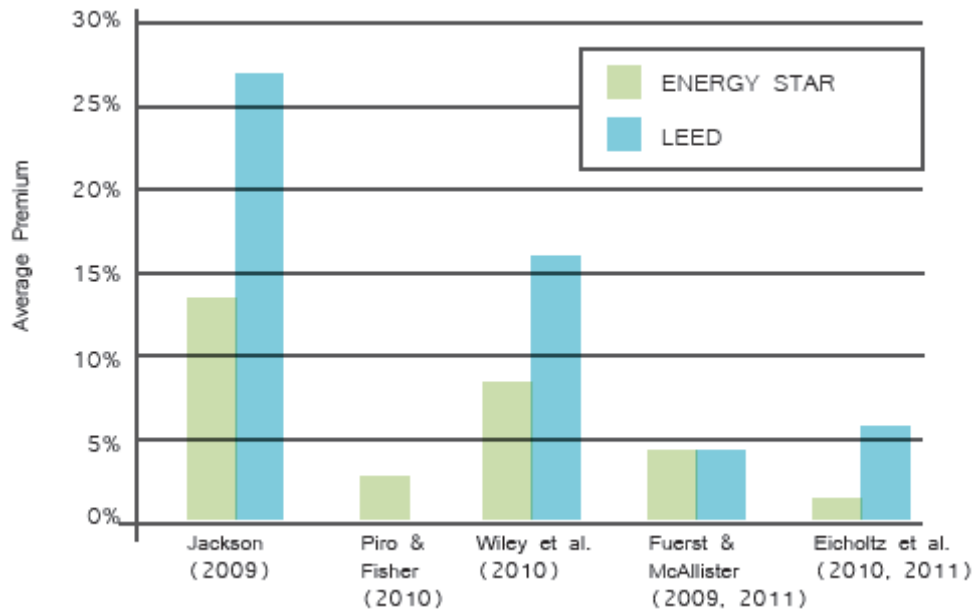


Figure 1. Rental premiums of green commercial buildings in the U.S. *Source:* Institute for Market Transformation 2012.

Occupancy Premiums

Occupancy premiums are the second value area identified in the guide. Potential premiums may include tenant retention and corresponding reduction in lost rents, reduced retrofit costs when spaces turn over, shorter vacancy periods, and improved lease terms apart from rents, such as tenant concessions. For new and repositioned buildings, faster absorption of leasable space can convey additional value as well by shortening the time it takes the asset to reach stabilized occupancy. According to leading appraisers, inputs from tenants and brokers on these occupancy attributes can be furnished to appraisers to make a compelling case for adjustments to expected vacancy rates and value. For instance, letters of support from tenants may justify expectations of a low vacancy rate that is lower than the market average. To underscore the potential impact of occupancy premiums, table 1, below, uses the income capitalization approach to value to approximate the potential for occupancy premiums to impact value for hypothetical 100,000 square foot commercial office buildings in select U.S. markets. Although some studies indicate the potential for a greater occupancy premium, this diagram demonstrates the effects of a conservative two percent occupancy improvement.

Table 1. Value from occupancy premium of two percent, CBD office

Select markets	CBD gross asking rent	Annual gross income from additional occupancy	Market cap rate	Gross incremental building value, income capitalization approach
San Francisco	\$51	\$81,422	5.00%	\$1,828,440
New York (Downtown)	\$48	\$86,256	5.25%	\$1,649,254
Atlanta	\$22	\$40,158	7.75%	\$518,168
Phoenix	\$21	\$36,936	7.00%	\$527,657
Kansas City	\$16	\$28,242	8.00%	\$353,025

100,000 square foot buildings. Net leasable area assumed to be 90 percent of gross building area. *Sources:* Colliers 2013 (rents), Integra 2013 (cap rates).

Operating Expenses

Among other areas where additional value can be assigned to green buildings, the most straightforward opportunity is lower operating expenses. Utility costs are chief among observed operating expense savings attributable to high-performance measures. In the context of the income approach to valuation, these energy savings reduce operating expenses and increase net operating income (NOI) – which can have positive effects on value. Value attributed to these expense savings is dependent on lease structure; owners can only directly recoup these savings when they are responsible for utility payments. For these owners, even small energy savings are magnified during building valuation. The guide provides a variety of examples corresponding to increasingly deep retrofits, as illustrated in figure 2, below. For example, a reduction of 10 percent on a 100,000 square foot office paying \$2.50 per square foot for energy can translate into \$25,000 in NOI, or \$313,000 at an eight percent cap rate.

Table 2. Energy savings create value by increasing NOI: commercial buildings

Energy saved (%)	Savings per square foot	Value per square foot
Baseline	-	-
5%	\$0.15	\$1.56
10%	\$0.25	\$3.13
15%	\$0.38	\$4.69
25%	\$0.63	\$7.81

Income capitalization approach to value. Assumes owner is responsible for utilities, energy baseline estimated \$2.50/SF/YR, cap rates eight percent. *Source:* Institute for Market Transformation and Appraisal Institute, 2013.

The guide also makes a distinction between leading markets and those with lower rents. In leading markets with high rents, energy savings may appear relatively small as a percent of operating income, however, low cap rates can magnify savings into more value per square foot. By contrast, in markets with lower rents, energy costs represent a much larger percentage of net income, thus presenting owners and managers with an improved cash flow and helping savings ‘punch above their weight,’ in spite of higher cap rates.

Operational savings on maintenance and reserves may convey value as well, as building owners stand to lower maintenance costs by installing longer-lived or more durable components such as LED lights. As many of these technologies are new, guidance is provided for owners on the need to explicitly account for the expected equipment lifespan (such as through manufacturer guarantees) and planned maintenance in order to justify positive value adjustments.

Risk

Finally, the guide outlines the importance of the value of risk-mitigating protections that green assets offer to owners and banks. In the appraisal and underwriting process, high-performance buildings can offer hedges against changing consumer preferences as well as new laws and increasing energy prices. For many appraisers interviewed, this best-in-class market position can be considered a measure of future-proofing, possibly allowing for an adjustment of the project cap rate. For owners of green buildings, the guide encourages owners to document risk mitigation actions taken in support of such an adjustment, and provides a list of opportunities, such as commissioning.

Interacting with Banks and Appraisers

Active engagement and advocacy on the part of building owners is crucial to ensuring that owners maximize valuation for green and high-performance buildings. Crucially, owners of high-performing assets must request an expanded scope of service in the appraisal that accounts for the complexity of high-performance buildings. The appraiser is the one who develops a “scope of work” for the appraisal, but the lender can make a “scope of services” request in the bidding or request for proposals for the assignment. Interviews with leading appraisers indicated that some banks are leaders in this area, and thus developers and owners should seek out banks wisely, engaging with financial institutions with expertise in this area. Owners can further ask for a professionally-designated appraiser (such as those who carry the MAI, SRA or SRPA designations conferred by the Appraisal Institute). Lastly, at the review stage the bank or investor is expected to analyze the appraisal, and as a result banks with a qualified reviewer can make a difference.

For appraisals, interviewees universally indicated that owners must be prepared to provide as much data as possible. Examples include but are not limited to: a market study with comparable properties, energy audits or bills, equipment specifications and monitoring plans, construction or retrofit costs, detailed financial data, and other due diligence. Information on tenant demand for green features – preferably with a list of tenant representative contact information can help as well. Leading appraisers advocated designation of a “champion” on the development or ownership team to unpack market research and due-diligence to create a value narrative appropriate for each asset. A checklist at the end of the guide summarizes the essential data. This information can be brought to bear at multiple points during the conventional appraisal process, which is diagrammed in figure 2, below.

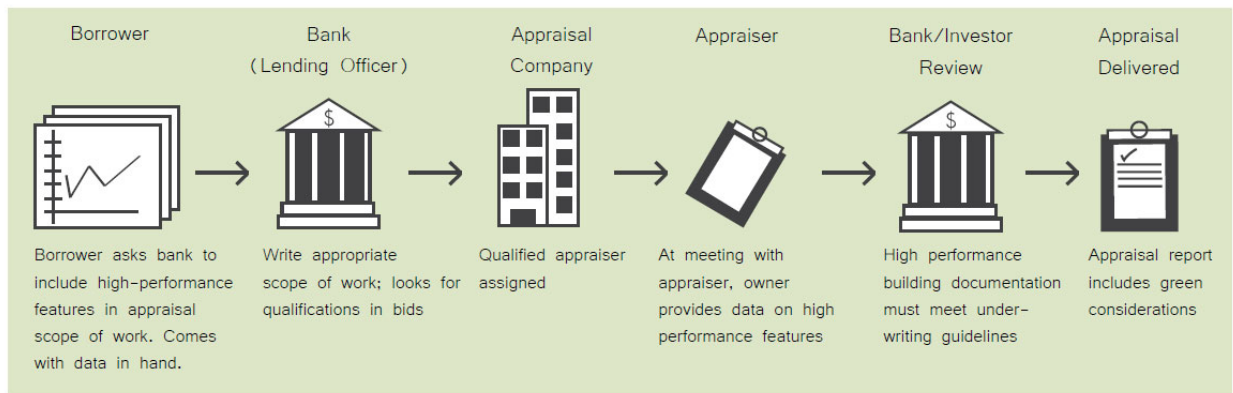


Figure 2. Appraisal process for green buildings. *Source:* Institute for Market Transformation and Appraisal Institute, 2013.

Leveraging Internal Valuation

The guide stresses the multiple opportunities to value green buildings, both at third-party appraisal at the time of a transaction and during internal valuation for assets under management. Although an internal valuation by an owner or appraiser may carry less weight as it does not support a transaction, it nonetheless provides owners with a crucial opportunity to collect performance data and create a value narrative supporting future refinance or sale. For private investment management firms and REITs, required annual (or quarterly) appraisal updates are a frequent opportunity to undertake this analysis in anticipation of sale and provide an opportunity to assess asset management by staff.

Owner Actions Checklist

As a result of conversations with owners, the guide provides guidance to owners on crucial data to assemble in support of valuing green buildings. These include a project vision, financial projections, technical specifications, cost information on improvements, utility bills and energy modeling results, certification reports, operations and maintenance plans, accounting of potential green downside risks, and team contact information.

Future Areas for Improvement

In order to achieve market transformation on integrating deep energy efficiency improvements in existing and new construction, owners will have to make ongoing commitments to track and report on current and emerging performance metrics. Indeed, many owners will have a newfound opportunity to track performance and make improvements as a result of new benchmarking and disclosure laws recently passed in many major U.S. cities. Additionally, as owners and appraisers improve valuation practices, lenders will increasingly have an opportunity to reward highly efficient buildings with more favorable lending and underwriting terms, not unlike the discounts currently offered by insurers for green properties. Beyond appraisal, lenders may find additional opportunities to consider green features in other areas of the traditional underwriting process, specifically where there are opportunities to consider planned energy efficient retrofits. One such example is the Green Physical Needs Assessment (GPNA), which

builds on the traditional Physical Needs Assessment (PNA)—a standard requirement in commercial real estate due diligence commissioned at sale or refinance that identifies expected capital improvements required during mortgage term. The GPNA goes a step further, by integrating above-code efficiency improvements into the traditional PNA structure. Widespread use of this tool would offer property owners, lenders, and appraisers the opportunity to anticipate and reflect value for planned green and high-performance retrofits made during the loan term.

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