

APPENDIX A

LEED Owner Assessment

A.1 LEED Accreditation Survey

A.2 Participant Responses

Todd Povell | Construction Management | Consultant: Dr. John Messner



A.1 LEED Accreditation Survey

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If you answer 'NO' to questi	on 1, please pro	oceed to Page 3	and continue.				
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			Page 2				
Owner/Developer Assess	ment of Cor	nmercial Off	ice Building	LEED Accred	litation	<u>Exit</u>	this survey >>
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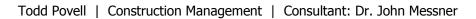
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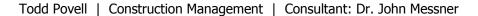
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4. All Survey Participants	
1. In a typical rental agreement, who pays for utility expenses?	
Owner / Developer	
J Tenant	
It has been accepted that sustainable buildings provide operational savings over the life of a facility. How does the utility	agreement between
your company and the tenant(s) on a particular project affect your decision to pursue LEED accreditation?	^ ~
It has been commonly accepted that LEED accredited buildings provide the following benefits: lower operatin occupant health, enhanced occupant physical comfort, and improved occupant productivity.	g costs, improved
Do you believe most tenants are willing to pay higher rental rates to work in a green building? Why or why not?	
4 / 5 80%	
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5.	
Thank you for your time and your input. Your participaion in my senior thesis research is greatly app	preciated.
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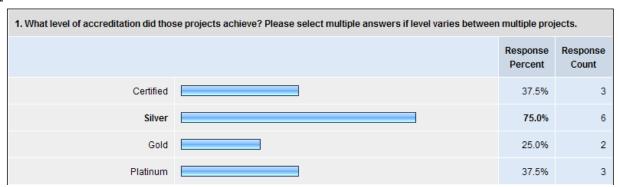


A.2 Participant Responses

Question 1.1:

1. Has your company constructed a LEED accreditated building in the past? If you answer 'YES' to question 1, please proceed to Page 3 and continue.							
		Response Percent	Response Count				
Yes		61.5%	8				
No		38.5%	5				
answered question							
skipped question							

Question 2.1:



Question 2.2:

2. Were tenant rental rates more expensive than to be expected if the project had not pursued sustainable options?									
	Cheaper	Same Price	0-5% More Expensive	5-10% More Expensive	10-15% More Expensive	15-20% More Expensive	>20% More Expensive	Rating Average	Response Count
Tenant Rental Rates	0.0% (0)	83.3% (5)	0.0% (0)	16.7% (1)	0.0% (0)	0.0% (0)	0.0% (0)	2.33	6

Comments:

- Rental rates were the same but the facility still remained vacant six months after project completion.
- The cost to perform the leed work was more expensive. This did not translate to an increase in the rental rate. It simply made the building more competitive in the market place.





Question 2.3:

3. Was it easier or more difficult to find tenants to occupy the LEED accredited projects as compared to a similar building that did not pursue sustainable options?									
	Much Easier	Easier	Slightly Easier	The Same	Slightly More Difficult	More Difficult	Much More Difficult	Rating Average	Response Count
Ability to Find Tenants	0.0%	37.5% (3)	25.0% (2)	37.5% (3)	0.0%	0.0%	0.0%	3.00	8

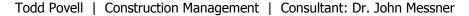
Comments:

- Most tenants have a corporate awareness, even a corporate directive about occupying LEED certified buildings, at a minimum. It's a corporate iconic statement about meeting energy and environmental obligations. More often, tenants value the comfort factor which is achieved through the LEED elements.
- Tenants are now demanding LEED buildings but are not yet ready to pay the extra rental dollars. If we are competing for tenants and the rental rates are the same the tenant will select the LEED building.

Question 2.4 What benefits have you seen in your LEED accredited projects? Is your company pleased with your decision to pursue LEED accreditation? Why or why not?

- Lower operating cost. Higher quality of space. No negative impact on architecture. Responsibility to future generations. Company is pleased with decision to pursue LEED rating for project.
- People enjoy the creature comforts and have experienced operational excellence, lower energy costs, lifted attitudes in employees.
- It is good business and leads to a more effective building for the owner and end users.
- Many tenants, especially governmental agencies or contractors, expect LEED accreditation as part of a newly constructed building specification. Our company is highly committed to pursuing LEED accreditation and pursuing sustainable design options in new as well as existing facilities.
- Ahead of the trend toward LEED related projects. No short term payback, but hopefully energy efficiency helps afford minor payback on first costs.
- There has been a lower rate of consumption with the utility. MITRE is a not-for-profit that works with the government and we are dedicated to sustainability where it makes financial sense. We have a vigorus recycling program at both locations and when making building decisions we incorporate sustainable design where we can even if it does not lead to LEED accreditation.

Question 2.5 What criteria are used to determine whether or not a specific project should pursue LEED accreditation? Please proceed to page 4 after answering this question to complete the survey.





- Our company policy is that every building we now develop will be LEED Silver or greater. This also includes any existing buildings we reposition in the market place if possible.
- All future developments will strive to be achieve LEED rating.
- Costs/building performa, target tenant audience, expected rents and payback periods.
- Whether or not the additional cost of LEED accreditation can be passed through to tenants on a spec. office project.
- Rate of return for the LEED Certification.
- In the current marketplace, LEED certification is becoming the norm for most new projects (unless budget restrictions do not allow for these upgrades.) It is seen as a marketable advantage, as well as the "right thing to do."
- Target tenant profile. Will they be conscious of the LEED designation? Will it differentiate you in a positive way from the competition?
- Basically it is a financial review.

Question 3.1 Would your company be interested in pursuing LEED projects in the future even if construction costs are more expensive than a traditional building of the same type? Why or why not?

- Yes because many tenants are now demanding LEED certified space. However, if the target audience isn't sensitive to LEED than perhaps not.
- Yes we have a new awareness of sustainability and are looking to build LEED's buildings and get existing buildings certified.
- Only is the rental market will sustain the added cost or if the project is build for a signed tenant.
- Yes
- If everyone else is doing it, then yes. If the operating costs are sufficiently lower to offset the higher first costs, then yes.
- Yes
- The LEED process is more expensive than regular construction as a general rule. While we strive to include sustainable elements in the design of each project we don't typically pursue LEED accreditation because of the cost.
- Educating Owners regarding the benefits vs cost of LEED certification is very important. Some Jurisdictions are requiring that LEED certification be part of future projects, so this will likely become less of a problem. Previous projects have evaluated LEED, but the cost vs benefit was not accepted by the Owner.

Question 3.2 What factors have prevented your company from pursuing a LEED building in the past or will prevent you from pursuing a LEED building in the future?

- Cost but what we have learned is that today's building design gets you to a LEED certified space anyway, with incremental costs to go to silver. The more important question is converting a building into LEED EB and if the existing/new prospective tenants will value that costly conversion.
- Cost Effort to document
- Costs and the ability to recover in the current rental market.
- Cost

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- Higher first costs. For the record, these are coming down as more suppliers respond to sustainable design.
- Timing
- Basically cost, if first cost is not offset by a relatively short pay back for the additional costs then we wouldn't pursue the accreditation.
- Cost vs. benefit. Return on investment is the biggest issue, not just the fact that you can advertise LEED certification. More time evaluating the benefits will make the case easier, especially with the "Green" trend that our country is pursuing.

Question 4.1

1. In a typical rental agreement, who pays for utility expenses?						
		Response Percent	Response Count			
Owner / Developer		18.2%	2			
Tenant		81.8%	9			

Question 4.1.2 It has been accepted that sustainable buildings provide operational savings over the life of a facility. How does the utility agreement between your company and the tenant(s) on a particular project affect your decision to pursue LEED accreditation?

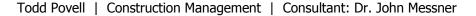
- None We will only develop LEED Silver buildings or greater.
- This varies and is packaged in many different ways-but ultimately, tenant pays
- If a commercial full service lease the electricity is paid by the landlord.
- In some facets, it is more an issue of marketing to political correctness, though sustainable approaches have a proven return on investment, where LEED as a certification often does not.
- Depends on the lease agreement --operating expenses are typically passed on to the tenants. On specific buildings, LEED certification is seen as a marketing advantage. On build-to-suit projects, many tenants request LEED certification.
- Obviously, if the Landlord is responsible for utilities or increases above a base amount, we are more motivated to control them. In a typical commercial lease, tenants pay these costs, so the Landlord is more interested in being competitive from a building operations standpoint in attracting the tenant upfront.
- Does not.

Question 4.2 It has been commonly accepted that LEED accredited buildings provide the following benefits: lower operating costs, improved occupant health, enhanced occupant physical comfort, and improved occupant productivity. Do you believe most tenants are willing to pay higher rental rates to work in a green building? Why or why not?

- Not yet. The market is not there that a tenant will not agree to pay extra for a LEED building.
- Lower operating costs, improved employee well being and employee retention.
- Maybe not higher rates, but it could be a differentiator

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- I do not. Most of our tenants are small business that is owned not corporate entities. They are bottom line driven--how much profit do I deliver to the bottom line.
- No....it is just like an office building. They love love the grand lobby and then they ask how much is the rent. It only goes so far.
- Yes
- Some tenants are willing to pay a slight upcharge for green buildings. It may help their image with the public, with their clients & with employees/recruiting.
- Maybe if they believe the evidence of improved employee efficiency studies; although we haven't experienced this yet.
- Yes, marketing and operations.
- if we were to lease a building we probably would not pay higher than the prevailing rate for for space in a LEED building do to our relationship with the government and their concern about our rate structure.
- I would think from a Government Tenant perspective this could be a selling point and current project is basing the redevelopment model on that. Private tenants (large in scale) will likely be more inclined to entertain the potential, smaller cost sensitive tenants may look for a different building in the near future. Overall, the trend will be to be Green.