



GSA LEED® Cost Study and LEED® Applications Guide

Nationwide



LEED® Cost Study

Final Report

Sustainable Building Practices

Steven Winter Associates and our key subcontractor Skanska, USA developed the GSA LEED® Cost Study and the companion GSA LEED® Applications Guide for the U.S. General Services Administration (GSA). The purpose of the study was to estimate the costs to develop “green” federal facilities using the U.S. Green Building Council’s Leadership in Energy and Environmental Design (LEED®) Building Rating System, Version 2.1. The report provided a detailed and structured review of both the hard cost and soft cost implications of achieving Certified, Silver, and Gold LEED® ratings for two GSA building types, using GSA’s established design standards as the point of comparison.

The two building types studied were:

- A new 262,000 GSF mid-rise federal Courthouse
- A mid-rise 306,600 GSF Federal Office Building modernization

These building types reflect a significant percentage of GSA’s planned capital projects for the next five to ten years.

From these individual credit assessments, overall project cost estimates were developed for 12 LEED® rating “scenarios” (6 for each building type).

The study determined that beyond the issue of cost variations, the broader implication derived from the Courthouse and Office Building models is that GSA’s green building costs can be managed, and to some degree predicted, if a consistent approach is applied from project to project.

262,00 GSF, Base Construction Cost = \$220/GSF						
Certified		Silver		Gold		
1A	2A	3A	4A	5A	6A	
Low Cost	High Cost	Low Cost	High Cost	Low Cost	High Cost	
LEED CONSTRUCTION COST IMPACTS*						
\$/GSF	\$0.76	\$2.18	\$0.07	\$9.47	\$2.97	\$17.79
% CHANGE	-0.40%	1.00%	-0.03%	4.40%	1.40%	8.10%
OFFICE BUILDING MODERNIZATION						
(306,600 GSF, Base Construction Cost = \$130/GSF)						
Certified		Silver		Gold		
1B	2B	3B	4B	5B	6B	
Min. Facade	Full Facade	Min. Facade	Full Facade	Min. Facade	Full Facade	
LEED CONSTRUCTION COST IMPACTS*						
\$/GSF	\$1.78	\$2.73	\$3.94	\$5.55	\$10.58	\$10.22
% CHANGE	1.40%	2.10%	3.10%	4.20%	8.20%	7.80%
NEW COURTHOUSE						
262,00 GSF, Base Construction Cost = \$220/GSF						
Certified		Silver		Gold		
1A	2A	3A	4A	5A	6A	
Low Cost	High Cost	Low Cost	High Cost	Low Cost	High Cost	
LEED SOFT COST IMPACTS*						
EXPERT CONSULTANT APPROACH (\$/GSF)	\$0.41	\$0.46	\$0.41	\$0.55	\$0.61	\$0.80
EXPERIENCED DESIGN TEAM APPROACH (\$/GSF)	\$0.43	\$0.45	\$0.44	\$0.54	\$0.56	\$0.73
OFFICE BUILDING MODERNIZATION						
(306,600 GSF, Base Construction Cost = \$130/GSF)						
Certified		Silver		Gold		
1B	2B	3B	4B	5B	6B	
Min. Facade	Full Facade	Min. Facade	Full Facade	Min. Facade	Full Facade	
LEED SOFT COST IMPACTS*						
EXPERT CONSULTANT APPROACH (\$/GSF)	\$0.41	\$0.41	\$0.44	\$0.49	\$0.70	\$0.69
EXPERIENCED DESIGN TEAM APPROACH (\$/GSF)	\$0.35	\$0.35	\$0.38	\$0.44	\$0.59	\$0.58

Client: Skanska
 Location: Nationwide
 Building Type: All
 Building Size: All Buildings
 Project Status: Continuing
 Reference: www.wbdg.org
 SWA Contact: Ed Acker
 acker@swinter.com