



Estimated Costs of Maintenance, Repair and Remodeling

for the Wisconsin Barn Preservation Initiative*

While no information can replace an on-site inspection and detailed cost estimate, this document provides a starting point for owners concerned with the maintenance, repair and remodeling of their barns. These "rough estimates" were developed through telephone interviews with several of the buildings contractors noted in the associated "Short List of Contractors and Consultants." Any additional feedback would be appreciated.

*As the revision date below indicates, this information is periodically updated. To receive the most current materials please contact the author or access the information at the following Internet address:
<http://www.uwex.edu/lgc/barns/barns.htm>*

Compiled By:

Charles S. Law, Ph.D.
Community Planning and Design Specialist
Local Government Center
229 Lowell Hall, 610 Langdon Street
Madison, WI 53703
(608) 265-2501
E-mail: cslaw@facstaff.wisc.edu

* The Wisconsin Barn Preservation Initiative is an ongoing effort aimed at helping preserve many of the historic agricultural buildings in Wisconsin. Advising this initiative are the University of Wisconsin-Extension, the State Historical Society of Wisconsin, and the Wisconsin Trust for Historic Preservation. For more information please contact the author.

Revised 12/98

Do your homework, then consult a professional: Barns often have "hidden" problems and it is impossible to develop an accurate estimate of work needed without studying the building. There is no substitute to having a qualified consultant or contractor make a site visit. Barn owners should refer to the associated short list of contractors that has been developed. Before meeting with a contractor, it is important to familiarize yourself with the type of work and costs that may be involved. Be a knowledgeable consumer, and make sure consultants and contractors are qualified. A qualified home contractor may not be equally qualified to work on a barn. For more detailed information on the work listed below, please see the list of supportive resources and literature.

Be aware of the rates for craftspeople: Many cost estimates will be based on "time and materials" so it is helpful to have estimates for the hourly rates of craftspeople. Expect "historically accurate" restoration to cost more due to the added expense of finding and matching original materials as well as the specialized skills required of the contractor.

	Estimate	Unit
general carpenter	\$17.50	hr.
general carpenter's assistant	\$12.00	hr.
restoration / specialized carpenter	\$30.00-45.00	hr.
stone restoration: masons	\$35.00	hr.
labor	\$25.00	hr.
general: masons	\$16.00	hr.
painters	\$16.00	hr.
roofers	\$16.00	hr.
general contractor	5-10% project cost	
"as is" blueprints & detailed restoration~conversion recommendations	\$500	job
working blueprints for conversion to home	\$1500	job
general consulting - scoping out work for contractors to bid	\$250 to several thousand	

Don't forget about doing your own preventative maintenance: A small investment in regular maintenance can save a lot of money in the long run. The type of work involved in maintenance is well suited to the "do it yourself" barn owner. Most damage to buildings is caused by water, including frost heave. Working gutters and down spouts with correct grading and landscaping can extend the life of foundations. Roof maintenance and painting of wood surfaces is equally important. Even when barns are vacant, the building still needs to be maintained and insulated against cold and other elements.

Consider the need for professional maintenance and repair: The following estimates are based on the assumption that there are no hidden or additional problems. By evaluating all aspects of the barn from foundation to framing to roof to exterior walls to the interior (often in that order), the barn owner should be able to reduce uncertainty.

1. FOUNDATION	Estimate	Unit
stone restoration (soft mortar is key)		
tuck pointing only *	\$10.00 - 15.00	sq. ft.
stone demolition and relay *	\$20.00 - 30.00	sq. ft.
* price depends on size of stone, condition of wall, etc.		
may be more cost effective to replace rather than repair		
- 10" poured concrete	\$209	lin. ft.
(replacement will involve jacking up wall & mow floor)		
jacking up barn		
- jacking up only: 60' barn	\$1,800	ea.
- even ceiling	\$2.50	sq. ft.
- or "depends on size and condition of barn"	\$200 - 20,000	ea.

	<u>Estimate</u>	<u>Unit</u>
2. FRAMING: posts, beams, sills, rafters, and joists		
* may involve removing weight (jacking) & replacing members		
straightening end wall	\$800.00	ea.
pulling together joints (ex. mortise & tennon)	\$300 -700	ea.
replacement of support beams / posts	\$200 - 500	ea.
* concrete pier may be needed		
or	\$20.00	ft.
replacement of sill / beam for 60' side	\$2,500	ea.
* includes: 8" x 8" oak beam, jacking up (5 posts)		
3. ROOF		
new painted metal roof, steel (ex. 29 gauge) & 2" x 4"	\$1.00 - 2.00	sq. ft.
or	\$10,000 - 12,000	barn
* should also add roof ventilation (50% of roof line)		
- 10' ventilation regulator	\$200.00	ea.
new layer of organic asphalt shingle (< 3 layers on roof)	\$1.00	sq. ft.
strip old shingles & add layer of plywood deck	\$1.10	sq. ft.
4. EXTERIOR WALLS		
new exterior siding: wood (reverse baton, shiplap, carsiding)	\$1.75 - 3.00	sq. ft.
rough sawn	\$1.75	sq. ft.
board & baton	\$2.25	sq. ft.
painting barn exterior (wall surface)	\$.40 - .60	sq. ft.
or 5000 sq. ft. barn (wall surface)	\$2,000 - 3,000	barn
- same barn with chemical strip estimated at	\$10,000	barn
or 40' x 100' barn	\$1800	barn
* includes: removal of loose paint, painting of standard trim		
- possible extras: renailing loose boards	\$400 - 600	barn
replacing boards		
painting window trim	\$2.00	"light"
new exterior siding: metal - painted	\$1.00 - 4.00	sq. ft.
or a 36' x 87' x (16'-20') barn including all trim	\$18,000	barn
or 5-6 times what it would cost to just paint		
5. INTERIOR		
cleaning barn interior: pressure washing	_____	sq. ft.
whitewashing barn interior	_____	sq. ft.
removal of old interior concrete floor / stanchions	\$1.00 - 3.00	sq. ft.
- remove old floor / stanchions & repour (50 cow barn)	\$4,000 - 6,000	ea.
new interior concrete floor	\$2.00 - 2.50	sq. ft.
interior finishing and insulation of walls	\$2.50 - 4.95	sq. ft.
new floor boards	\$1.50 - 3.00	sq. ft.
windows (4' x 2' Aluminum slider with screen)	\$186.00	ea.
doors (service 3' x 6'-8")	\$296.00	ea.
(big door with steel frame)	\$500.00	ea.

Sometimes remodeling is desired: There is overlap between remodeling and maintenance and repair, but the following would not be typical work and may be more relevant to remodeling or adaptive reuse.

	Estimate	Unit
addition of interior non-load bearing walls	\$3.50	sq. ft.
repositioning of support columns	\$80.00	ea.
new stairs leading to loft / second story	\$400.00	ea.
new furnace / heating system (inc. duct work & furnace)	\$5,000 - 7,000	ea.
- addition of Air conditioning	\$1,450	ea.
plumbing	\$5,500 - 6,000	ea.
addition of bath: 1/2 bath (powder bath / stool)	\$1,000	ea.
addition of bath: full bath	\$5,000	ea.
septic system (average)	\$5,500	ea.
- conventional	\$2,500	ea.
- mound	\$8,000 - 9,000	ea.
moving smaller ag buildings (barns too big, floor unconnected)	\$5,000 - 8,000	ea.
* influenced by how big, how built, how far		

Conversion to a home: The example provided is for a two and a half story barn, 30'x40'. This barn would have a footage print of 1200 square feet and a second floor of about 800 square feet.

2000 sq. ft. living area = \$150,000	\$75.00	sq. ft.
200 sq. ft. upper loft = \$9,000	\$45.00	sq. ft.
1200 sq. ft. full basement = \$12,000 (unfinished)	\$10.00	sq. ft.