



Weekly Farm Economics: Machinery Cost Estimates for 2012 and 2013

Gary Schnitkey

Department of Agricultural and Consumer Economics
University of Illinois

May 30, 2012

farmdoc daily (2):102

Recommended citation format: Schnitkey, G. "[Machinery Cost Estimates for 2012 and 2013.](#)" *farmdoc daily* (2):102, Department of Agricultural and Consumer Economics, University of Illinois at Urbana-Champaign, May 30, 2012.

Permalink: <http://farmdocdaily.illinois.edu/2012/05/machinery-cost-estimates-for-2.html>

Every two years, the costs of machinery operations are calculated and made available on farmdoc. The 2012 costs now are available under the "Machinery Costs" link in the *farmdoc* [Management section](#). Overall, costs have increased by about 15 percent between 2010 and 2012. In our estimates, combine costs have declined between 2010 and 2012 because acres covered with the combine are assumed to increase in 2012.

Table 1 shows per acre costs for 2010 and 2012 for selected operations. As can be seen, chisel plowing costs increase from \$12.80 per acre in 2010 up to \$14.50 per acre in 2012, an increase of 13 percent. Field cultivating costs increase by 11 percent (from \$8.80 per acre to \$9.80 per acre) and planting costs increase by 14 percent (from \$11.10 per acre up to \$12.70 per acre).

Table 1. Machinery Cost Estimates, 2010 and 2012.

	Year	
	2010	2012
	per acre	
Chisel plow	12.80	14.50
Field cultivator	8.80	9.80
Planter	11.10	12.70
Combining-corn	35.80	33.70
Combining -- soybeans	31.40	28.30

Several factors influence machinery cost changes between 2010 and 2012:

Machinery prices have increased Prices of new machinery have increased for most machines between 2010 and 2012. For example, the list price of a 215 horsepower tractor in 2012 is \$215,000. A comparable sized tractor in 2010 has a list price of \$181,500. Between 2010 and 2012, the price of this tractor has increased by 18 percent. The impact of price increases is to increase machinery costs.

Interest rates have declined When calculating 2010 costs, a 6 percent interest rate is used. A 5 percent interest rate is used in calculating 2012 costs. The impact of an interest rate decline is to reduce machinery costs.

Fuel prices have increased A \$2.80 per gallon diesel fuel price is used in calculating costs in 2010. A \$3.50 per gallon price is used for calculating 2012 costs. The impact of a fuel price increase is to increase in machinery costs.

Labor prices have increased A labor charge of \$16 per hour is used in 2010 and a \$17 per hour charge is used in 2012. The impact of the increase in labor charge was to increase machinery costs. Combining costs are estimated at \$35.80 in 2010. The 2012 cost is \$33.70 per acre. Combining costs have declined because acres covered by a combine are increased. In 2010, costs are estimated using 1,400 acres were combined. In 2012, costs are estimated given that 1,900 acres were combined. Use has a large impact on all costs.

Summary

Machinery costs generally have increased between 2010 and 2012. Estimated cost increases would have been larger had not interest rates declined. Machinery costs will increase in the future if interest costs begin to rise.