

Applied Risk Analytics

Estimating Custom Rates and Machinery Costs

Machinery and equipment is often one of the largest expense categories for a farm or ranch operation. Many producers do not know their machinery and equipment cost for a given activity. Some expenses, such as fuel, repair, and other general costs are fairly easy to quantify; calculating individual expenses for a given machine and field activity is more difficult.

Learn more via the **APPLIED RISK ANALYTICS** series, covering the application of RightRisk Analytics risk analysis tools, available for download at: <https://RightRisk.org/appliedriskanalytics>.

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Some expenses, such as fuel, repair, and other general costs are fairly easy to quantify; calculating individual expenses for a given machine and field activity is more difficult. The nature of most agricultural activities provides a wide variation in machinery expenses, depending on operation size, scope, and other factors. Informed assumptions about expenses could negatively affect the bottom line.

Machinery Cost Solution

The Machinery Cost Calculator (MCC) from RightRisk.org can help producers estimate rates for custom field operators and individual machinery costs. The tool will also estimate the risk probability of those costs to change in various factors. The MCC uses a comprehensive list of related expenses to calculate an overall cost, including expected life (years), repairs, depreciation, housing, insurance, taxes, and annual use (hours).

RightRisk Analytics

Users can estimate expenses for powered equipment, three different implement types, vehicles, powered engine equipment, engine-powered engine equipment, and field operation costs. The MCC generates results based on the data entered, providing estimates of annual and average operating costs for each machine.

RightRisk Analytics tools and guides are available at no cost at the website <http://RightRisk.org>

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The farm machinery industry continues to face an uncertain future. The decline in machinery prices, along with the high cost of fuel, oil, and other inputs, has led to a higher cost per hour when compared to the 1980s, when most of the cost of the machine was in the purchase price of the machine. This has led to a shift in the way that machinery is used, with a focus on efficiency gains.

Range of values for use in cost categories risk analysis. "Reluctant gambler" and "Wise risk" are the most common risk profiles. The graph shows the probability of exceeding a cost per acre, starting fuel and oil expense.

Probability

Fuel Expenses (Cost Per Acre)

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USDA RMA



How Much Risk is Right for You and Your Operation? RightRisk.org