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UNIVERSITY OF ILLINOIS

FAST Tools:
Hands-on Computer Applications

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Agricultural and Consumer Economics

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Outline

- FAST Tools overview

- Hands-on Applications
  - Grain inventory management
  - Crop budgeting
  - Grain delivery costs and returns
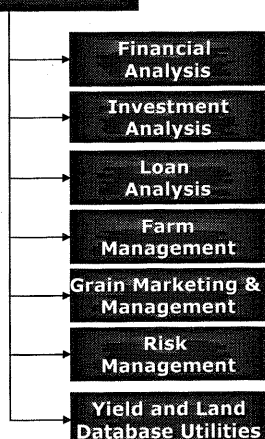 - Others

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FAST Tools

- **farmdoc** companion project initiated in 1999

- Development of spreadsheet-based tools to aid decisions for producers, lenders, consultants and investors

- Facilitate use, access, distribution of tools and resources through CD <u>and</u> internet distribution
  - Quarterly subscription
  - **farmdoc** download
  - via workshops

- Approximately, 20,000 CDs produced and another 15,000 downloads

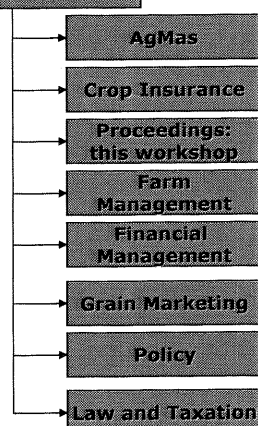- Increased demand for education and training

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FAST Tools - Overview

Computerized Decision Aids

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Computerized Decision Aids	farmdoc materials
Financial Analysis	AgMas
Investment Analysis	Crop Insurance
Loan Analysis	Proceedings: this workshop
Farm Management	Farm Management
Grain Marketing & Management	Financial Management
Risk Management	Grain Marketing
Yield and Land Database Utilities	Policy
	Law and Taxation

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Financial Analysis

Assist in preparing and interpreting financial information and measuring financial health

- ❖ Appraisal of current financial position
- ❖ Balance sheet
- ❖ Ratio calculator
- ❖ Cash flow planning
- ❖ Cash to accrual income approximation
- ❖ Estimates of deferred taxes
- ❖ Repayment capacity analysis
- ❖ Net worth allocation

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Investment Analysis

Assist in measuring the economic returns and performance of alternative types of investments.

- ❖ Capital budgeting
- ❖ Grain bin analysis
- ❖ Land purchase analysis
- ❖ Lease versus purchase
- ❖ Machinery financing
- ❖ MACRS calculator
- ❖ Savings calculator
- ❖ Time value of money calculator

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Loan Analysis

Assist in calculating loan payments and schedules; comparing alternative loans; and measuring the sensitivity of payments to changes in loan parameters

❖ Loan amortization
❖ Loan comparison
❖ Revolving loan calculator

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Farm Management

Assist in developing enterprise budgets and breakeven levels; estimating costs of machinery operations; and comparing crop insurance and farmland leasing alternatives

❖ Break even analysis
❖ Crop budgeting tool
❖ Crop insurance calculator
❖ Enterprise allocation and analysis
❖ Farmland lease analysis
❖ Machinery lease analysis

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Grain Marketing and Management

Assist in tracking grain inventory and estimating the costs and returns of grain storage and delivery

- ❖ Crop storage analysis
- ❖ Grain delivery model
- ❖ Grain inventory management

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Risk Management

Assist in evaluating the impact of farmland lease types as well as marketing and crop insurance strategies on revenue and income distributions.

- ❖ Crop insurance historical evaluator
- ❖ Farm rent evaluator
- ❖ Marketing and crop insurance risk model

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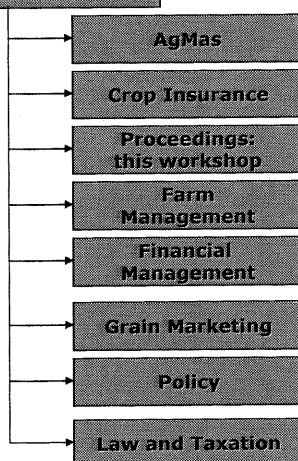**farmdoc**

Yield and Land Database Utilities

Assist in analyzing county-level historical crop yields and land prices and assist with common computations related to soil productivity measures and yield predictions

- ❖ Illinois crop yield database
- ❖ Illinois farmland sales database
- ❖ Iowa crop yield database
- ❖ Illinois soil productivity index utilities

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- AgMas
- Crop Insurance
- Proceedings: this workshop
- Farm Management
- Financial Management
- Grain Marketing
- Policy
- Law and Taxation

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farmdoc resources:
Farm Management

- Farm Economics: Facts and Opinions
- Costs of operating machinery
- Costs of production
- Crop budgets & Crop revenue less variable costs
- Hog budgets
- Farmland index numbers and Soil Productivity Ratings
- Leasing forms
- Share rent leasing characteristics by crop reporting district

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farmdoc resources:
Financial Management

- Farmers Guide to Agricultural Credit
- Producer preferences for lender attributes
- Getting ready to prepare a balance sheet
- Financial analysis primer
- Credit analysis report
- Family living tables
- Financial characteristics of Illinois Farms:2002-03
- Financial Characteristics: historical tables
- Machinery Investment per acre
- Time value of money concepts
- Investment analysis and capital budgeting guide

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Hands-On Applications:
Grain Inventory

With this program, the user can manage and
track grain inventories by
landowner, production
location, storage site and field.

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Hands-on Applications
Grain Delivery Model

This program aids
farmers in comparing net revenues
associated with delivering grain to
three different locations.
It will also compute the chance of obtaining
prices above break-even prices.

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Hands-On Applications
Crop Budgeting Tool

With this program, the user can budget per-acre returns from different crops. These estimates can be used to determine which crops to plant and how much to pay for cash rent.

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