#### FAST Tools – Planning Beyond 2008

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#### **Executive Summary**

- FAST Tools are a set of spreadsheet-based computer applications designed to assist users with farm economic decisions.
- FAST Tools applications are subdivided into financial analysis, investment analysis, loan analysis, farm management, grain marketing and management, risk management and yield database utilities.
  - <u>Financial analysis tools</u> assist users in preparing and interpreting financial information and measuring financial health.
  - <u>Investment analysis</u> tools assist users in measuring the economic returns and performance of alternative types of investments.
  - Loan analysis tools assist users in calculating loan payments and schedules; comparing alternative loans; and measuring the sensitivity of payments to changes in loan parameters.
  - Farm management tools assist users in developing enterprise budgets and breakevens levels; estimating costs of machinery operations; and comparing crop insurance and farmland leasing alternatives
  - <u>Grain marketing and management tools</u> assist users in developing enterprise budgets and breakeven levels; estimating costs of machinery operations; and comparing crop insurance and farmland leasing alternatives.
  - <u>Risk management tools</u> assist users in evaluating the impact of farmland lease types as well as marketing and crop insurance strategies on revenue and income distributions
  - <u>Yield database utilities</u> assist users in analyzing county-level historical crop yields and with common computations related to soil productivity measures and yield predictions.
  - <u>FAST Tools and Resources CD</u> also contain publications and resources in areas of AgMAS, crop insurance, farm management, financial management, grain marketing, policy, law, and taxation.
- Planning beyond 2008 requires a careful assessment of a farmer's objectives and long term goals.
- Decision criteria for investments and changes to an operation include measures of changes in efficiency, profitability, cash flow and overall wealth.
- FAST Tools provide a method to explore alternative economic and decision scenarios.
- Demonstrations of the Crop Rotation Tool, On-Farm Storage Analysis, Real Estate Purchase Analysis and Savings and Retirement Analysis are highlighted in the session.









#### **By Paul Ellinger and Travis Farley**





### Outline

- FAST Tools overview
- Financial Planning beyond 2008
- Hands-on applications
  - Changing crop rotations
  - On-farm grain storage analysis
  - Land purchase
  - Savings and retirement planning
  - Others

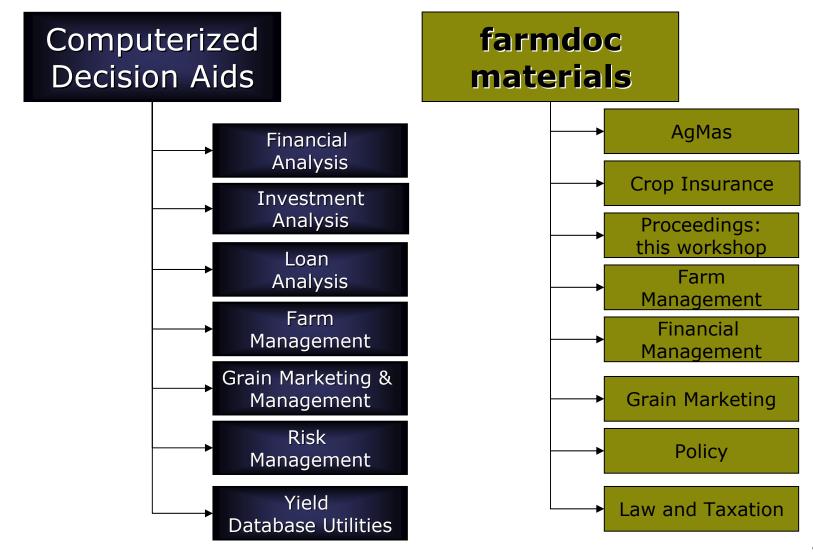


## **FAST Tools**

- **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 35,000 CDs produced and another 35,000 downloads
- Increased demand for education and training



#### **FAST Tools - Overview**





# **Financial Analysis**

Assist in preparing and interpreting financial information and measuring financial health

#### **Analyzing Current Financial Condition**

- Appraisal of current financial position
- Farm Financial Statements
- Personal Financial Statements
- Ratio calculator
- Cash to accrual income approximation
- Estimates of deferred taxes
- Net worth allocation

#### **Financial Planning**

- Cash flow planning
- Farm financial simulation
- Start-up company simulator
- Repayment capacity analysis



## **Investment Analysis**

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

- Capital budgeting
- Grain storage investment analysis
- Land purchase analysis
- Lease versus purchase
- Machinery financing
- MACRS calculator
- Savings calculator
- Retirement planner
- Time value of money calculator



## 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



## **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
- Crop rotation tools
- Enterprise allocation and analysis
- Farmland lease analysis
- Machinery economics



### **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
- Grain storage investment analysis
- ✤ Grain pricing model



### **Risk Management**

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

- Farm rent evaluator
- ✤ Insurance evaluator
- Marketing and crop insurance risk model
- Crop insurance payment calculator
- Premium calculators



### **Yield Database Utilities**

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

Illinois, Iowa, Indiana crop yield databases
Illinois soil productivity index utilities



#### FAST Hands-on Computer Workshops February - March

- Improving Your Financial Management
  - Preparing financial statements
  - Understanding your financial health
  - Ratio analysis and benchmarking your farm
  - Short and long-term projections
- Exploring Risk Management Strategies
  - Crop insurance update
  - Tools to assess marketing and crop insurance
- Attend one or two sessions



# **FAST Training**

#### February 14-15

Crowne Plaza Hotel 3000 S. Dirksen Parkway Springfield, IL 217-529-7777

#### February 21-22

Holiday Inn Hotel & Conference Center 1001 W. Killarney (Exit 183, I-74) Urbana, IL

217-328-7900

#### February 28 - March 1

Hickory Grove Banquet & **Conference** Center 1127 N. 7th St. Rochelle, IL 815-562-5668 March 7-8 Holiday Inn Hotel 222 Potomac Blvd. (Exit 95, I-57) Mt. Vernon, IL 618-244-7100

#### Visit www.farmdoc.uiuc.edu/fasttools/ for current FAST Training schedules



# **Long-term Decision Making**

#### **Decision** Criteria

- Effects on profitability and wealth
- Cash flow and liquidity impacts
- Operation efficiency and timeliness
- Comparisons to alternative future investments
- Feasibility of future investments
- Range of outcomes across potential scenarios

#### **Risk and Return**



# **Long-term Decision Making**

Key Input Elements

- Investment costs
- Additional revenues and costs –> net cash flows
- Valuation changes
- Time value of money
  - Investment Alternatives
  - Cost of debt
- Cash feasibility within given investment and financial plans



## **Long-term Decision Making**

#### FAST Tools

- Evaluate economic factors
- Alternative scenarios
  - Most likely
  - Best case
  - Worst case
  - Break even case
- Provide some benchmarks to support your decision





### Demo --Hands-on applications



