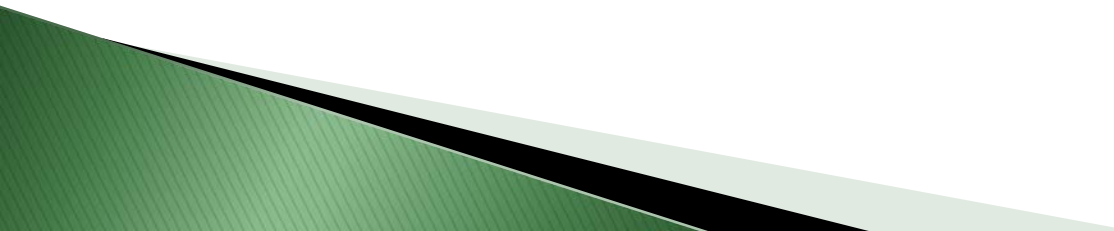


# A Snapshot of Kentucky's Equine Industry: The 2012 Kentucky Equine Survey

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# Kentucky Equine Survey– The Need

- ▶ The horse is Kentucky's signature industry
  - ▶ Desire by industry to have good data
  - ▶ The Great Recession of '08 – '09
  - ▶ Pressure on ag land from developers
  
  - ▶ Reliable data are needed for the future success and sustainability of Kentucky's equine industry
- 

# Equine Industry in the U.S.

- ▶ Very little information available
- ▶ Industry is highly decentralized and diverse
- ▶ U.S. is large geographically
- ▶ Conducting good surveys is expensive



# Kentucky Equine Survey

- ▶ Cooperation between universities, industry, and government
- ▶ \$600,000 project
  - \$200,000 from UK College of Ag
  - \$300,000 from state government
  - \$100,000 from industry individuals and organizations



# Kentucky Equine Survey

- ▶ Three components
  - Equine Operation Inventory
  - Economic Impact Analysis
  - Non-Market Valuation Survey



# Equine Operation Inventory

- ▶ Statewide survey of equine operations
  - Inventory of all breeds of equine, including horses, ponies, donkeys, and mules
  - Income, expenses, and assets
  - Conducted by National Ag Statistics Service (NASS)
    - Responsible for US Ag Census as well as annual surveys on other types of livestock and commodities

# Equine Operations

Primary Operation Type	Estimated Number	% of Total	% of equine-related activities that are income-generating
Farm or Ranch	19,500	55.7%	10% *
Personal Use	10,500	30.0%	6% *
Other	3,200	9.1%	8%
Boarding, Training, or Riding Facility	1,100	3.1%	56%
Breeding Operation	700	2.0%	73%
<b>Total</b>	<b>35,000</b>		

Many people participate in the horse industry for fun, and not for business.

# Statewide Equine Inventory

Category	Inventory	% of Total Inventory	(Partially) Owned	Boarded for Others
Light Horse	216,300	89.2%	176,500	39,800
Draft Horse	5,100	2.1%	4,900	200
Ponies	7,000	2.9%	6,500	500
Donkeys and Mules	14,000	5.8%	13,500	500
<b>Total</b>	<b>242,400</b>		<b>201,400 (83.1%)</b>	<b>41,000 (16.9%)</b>



# Equine Inventory: Breeds

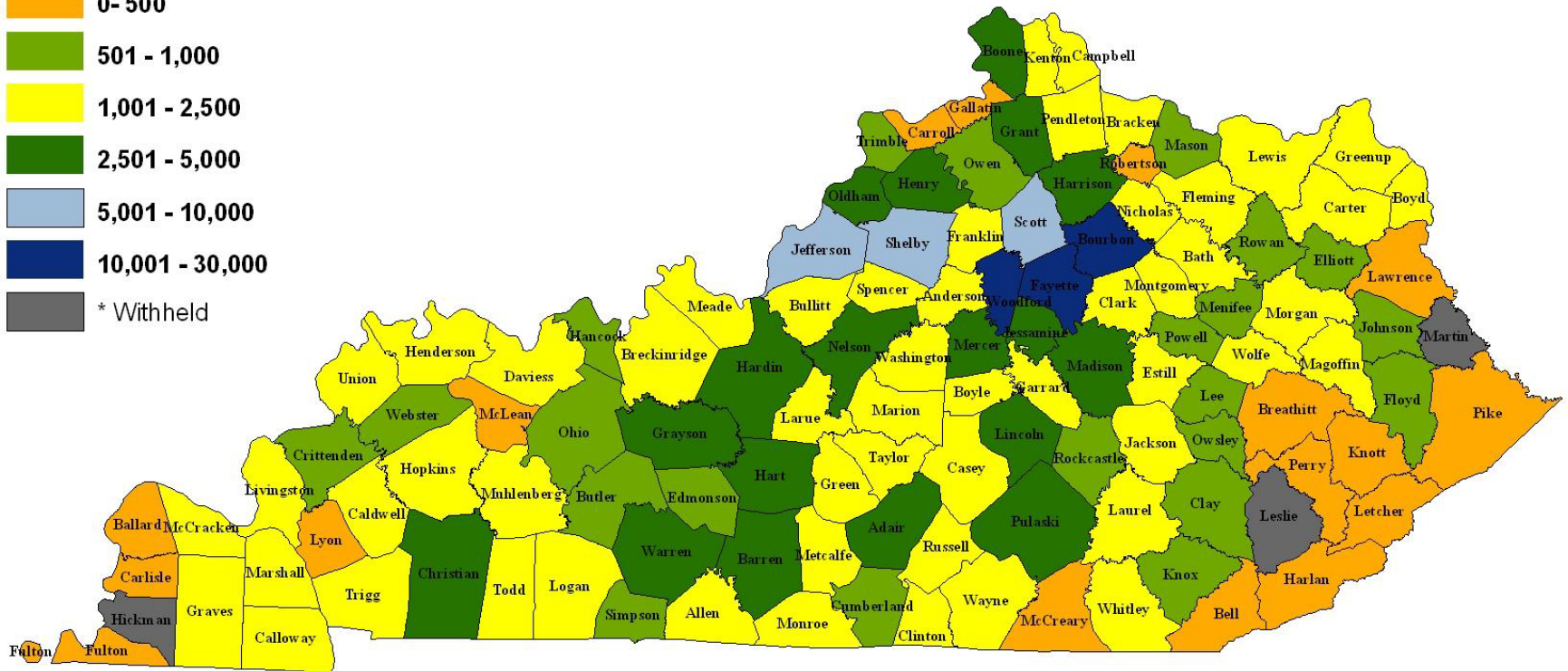
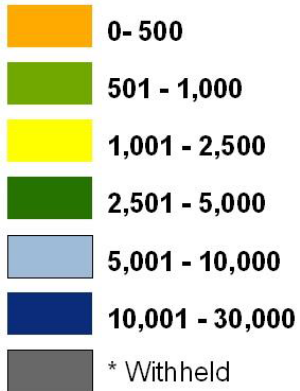
Breed	Estimated Inventory	Estimated Value	Estimated Mean Value
Thoroughbred	54,000	\$5.5 B	\$101,700
Quarter Horse	42,000	\$146 M	\$3,475
Tennessee Walking Horse	36,000	\$71 M	\$1,970
Saddlebred	14,000	\$173 M	\$12,350
Donkeys, Mules, & Burros	14,000	\$12 M	\$850
Mountain Horse Breeds	12,500	\$31 M	\$2,480
Standardbred	9,500	\$119 M	\$12,500

# Equine Inventory: Use

Type of Use	Estimate	% of Total
Trail Riding/Pleasure	79,500	32.8%
Broodmares	38,000	15.7%
Idle/Not Working	33,000	13.6%
Competition/Show	24,500	10.1%
Yearlings, Weanlings, & Foals	23,000	9.5%
Racing	15,000	6.2%
Other Activities	13,000	5.4%
Work/Transportation	12,500	5.2%
Breeding Stallions	3,900	1.6%

# Kentucky Equine Inventory by County


## Total Inventory



\* Withheld to avoid disclosing data for individual firms

# Value of Equine and Equine Operation Assets

Asset Type	Current Value	
Equine	\$6.3 B	Land, fencing, buildings
Equine Operation Assets	\$17.1 B	Vehicles and machinery
		Feed and supplies
<b>Total</b>	<b>\$23.4 B</b>	Tack and clothing



Kentucky has a huge investment in horses and in the infrastructure that accompanies the industry.

# Equine Sales and Income

Equine Sales and Income	Dollar Value
Sales (All Equine)	\$521.1 M
Services (Breeding & Non-breeding)	\$491.0 M
<b>Total</b>	<b>\$1.01 B</b>

## Breeding services (\$220 M)

- Stud Fees
- Semen...

## Non-breeding services (\$271M):

- Boarding
- Lessons
- Training
- Transportation...

# Equine Operation Expenditures

Expenditure	Dollar Value
Capital Expenditures	\$337.0 M
Operating Expenditures	\$839.0 M
<b>Total</b>	<b>\$1.2 B</b>

77% of expenditures spent in KY

## Capital Expenditures:

- Equine
- Real estate purchases
- Real estate improvements
- Equipment purchases

## Operating Expenditures:

- Maintenance/Repair
- Feed
- Breeding fees
- Health care
- Training fees...

# Economic Impact

- ▶ “Economic Impact” estimates the effect of the equine industry on Kentucky’s economy
  - **Output effect** – increase in sales due to presence of the industry
  - **Employment effect** – number of jobs created by industry
  - **Value added effect** – income paid to workers, profits earned by businesses, dividends distributed to shareholders



# Economic Impact

## ▶ Economic impact includes

### ◦ Direct effects

- Breeding operation purchases halters from a local leather and tack store

### ◦ Indirect effects

- Leather and tack store purchases buckles, etc.

### ◦ Induced effects

- Employees of leather and tack store spend income earned on other goods and services

Multipliers effect

The diagram illustrates the multiplier effect. It features three ovals: 'Indirect effects' and 'Induced effects' are on the left, and 'Multipliers effect' is on the right. Two green arrows originate from the right side of the 'Indirect effects' oval and the right side of the 'Induced effects' oval, both pointing towards the 'Multipliers effect' oval. The 'Multipliers effect' oval is tilted downwards to the right.



# Economic Impact

- ▶ Preliminary results (please do not cite w/o authors' permission)

	Employment (jobs)	Output	Value Added
Direct Equine Industry Impacts	32,022	\$1.78 billion	\$813 million
Total Equine Industry Impacts	40,665	\$ 2.99 billion	\$1.40 billion

- ▶ Final results and report on 9/6

# Non-market valuation survey

- ▶ Agricultural land under development pressure
- ▶ Agricultural land presents a number of “positive externalities”
  - Environmental
  - Recreational
  - Aesthetic
- ▶ Will residents pay extra taxes to preserve ag land? If so, how much?



*Photo courtesy Visit Lex*

# Non-market valuation survey

- ▶  $N = 8,200$  Kentucky residents
- ▶ Attitude Statements
  - “I think horse farms make Kentucky a nicer place to live.”
  - “I think the horse industry helps local economies.”
- ▶ Choice Card
  - In favor of a fictitious “Horse Farm Preservation Program” that KY residents would NOT have to pay for?

# Non-market valuation survey

*Please select the option you most prefer:*

## Option 1

*Action:* **The Horse Farm Preservation Program is implemented.**

*Outcome:* The equine industry in Kentucky is preserved at its present size.

## Option 2

*Action:* **No Action is taken by the state; residential and commercial development of horse farms occurs.**

*Outcome:* The equine industry in Kentucky will decrease in size by **15% (30%, 45%, 60%)** over the next ten years.

# Non-market valuation survey

- ▶ If no – why?
- ▶ If yes – In favor of a fictitious “Horse Farm Preservation Program” if state income tax rate had to be increased?
  - ▶ If yes – Payment card: what is their maximum willingness to pay?
    - ▶ Measured by annual tax increase
    - ▶ \$5, \$15, \$30, \$50, \$80, \$135, \$200
- ▶ Demographics
  - ▶ Gender, education, income, employed in equine industry, distance from nearest horse farm...

# Non-market valuation survey

## ▶ Preliminary results

- >85% support the “free” HFPP
- Of those, >80% were willing to pay some amount
- ~60% willing to pay at least \$50/yr
  - Results don't appear to be very sensitive to the size of the potential industry decrease

## ▶ Caveats

- Hypothetical money
- Potential for sample bias



# The Kentucky Equine Survey would not have been possible without widespread industry support!

Alltech ● Beta-Rock Stables ● Butler Schein Animal Health ● Cane Run Farm ● Commerce Lexington ● Daniel Boone Distance Riders ● Equine Medical Associates ● Farmers Feed Mill Fort Harrod Back Country Horsemen ● Hagyard Equine Medical Institute ● Keeneland Kentucky Association of Equine Practitioners ● Kentucky Dressage Association ● Kentucky Equine Education Program ● Kentucky Quarter Horse Association ● Kentucky Hunter Jumper Association ● Kentucky Paint Horse Club ● Kentucky Ropers' Association ● Kentucky Thoroughbred Association, Inc. ● Kentucky Thoroughbred Farm Managers Club ● Kentucky Trail Riders Association ● Kentucky Veterinary Medical Association ● Kentucky Veterinary Medical Association Foundation ● Lexington Equine Surgery ● Maplecrest Farm ● Masterson Station Equestrian Trust ● McMahon & Hill Bloodstock, LLC ● Merck Animal Health ● Misty Ridge Farm ● Mountain Pleasure Horse Association ● North American Equine Ranching Information Council ● Northern Kentucky Horse Network ● Pfizer, Inc. ● Rood & Riddle Equine Hospital ● Shawhan Place ● Siena Farm ● Sierra Farm ● Society for Arabian Horses in the Bluegrass Area ● Spycoast Farm ● United States Equestrian Federation ● Webster Pharmaceuticals ● ● ● and many generous individuals ● ● ●

# Thank you!

- ▶ Questions?

