

National Agricultural Statistics Service (NASS) vs. Land Grant University Cash Rent Surveys – Why the Differences?

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1

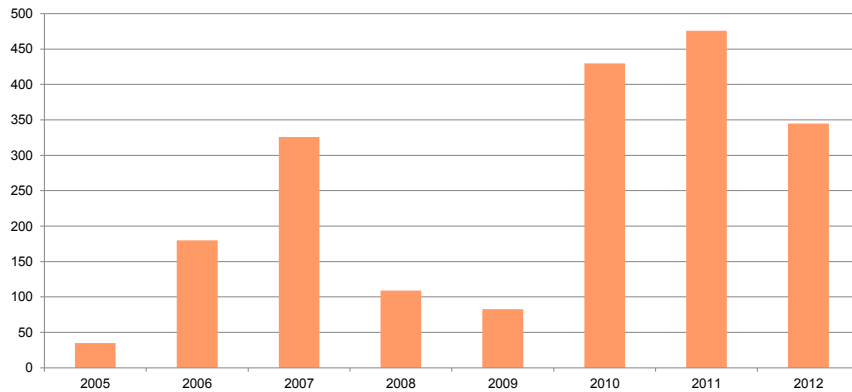
What is Driving Rents?

- Crop Net Income has been/projected to be good
- Farmers balance sheets continue to strengthen U.S. Farm Sector Debt to Asset Ratio – 10.6%
 - (D/A Ratio in 2002 was 14.1%)
 - \$'s to invest => machinery or land
- Low interest rates – 10 Year T-Bill – 2.0%
 - (As of Feb. 14, 2013)
 - (Low of 1.43% on 7-25, High of 2.39 on 3-19)
- Local land supply low
- Solid Safety Net
 - Crop Insurance
 - Farm Policy
 - Energy Policy
 - Little risk of agriculture being used as a foreign policy weapon

2

Profits in Grain Production Lead to Land Value and Rent Bull Market

Returns to Land – Ohio Corn



3

Cash Rental Rates – Little Public Information

- There is no Futures exchange....
- There is the local coffee shop exchange.
- Public land rentals results
- NASS Survey Effort
- Land Grant University Survey Effort
- Rent auctions
- Extension Educators, Professional Farm Managers, CEDs, Agronomists, and other professionals.
- Extension Educator county or region based survey

4

Existing Survey Efforts

- NASS
- http://www.nass.usda.gov/Quick_Stats/Lite/
- University Surveys
 - <http://aede.osu.edu/about-us/publications/western-ohio-cropland-values-and-cash-rents-2012-2013>
 - http://www.agecon.purdue.edu/extension/pubs/paer/pdf/PAER8_2012.pdf
 - <http://www.extension.iastate.edu/Publications/FM1851.pdf>

5


NASS - Methodology

- Mailed survey with follow up
- Population is U.S. farmers
- Asked to state:
 - Acres rented
 - Rent per acre (average on all rented acres) or
Total rent paid

6

NASS – Survey Instrument

CASH RENTS AND LEASES 2013



39 947032490 01 01 003218 0000135298 0



SURVEY CODE: 99-947032491-070; MO: 3180070 02
360201-090015

SARRY: 4402 00 00 021

3333 KILLBUCK RD
URBANA OH 43078-9583

H₁||||H₂|||H₃A-H₄A-H₅A|||H₆||||H₇PH₁PH₂PH₃PH₄PH₅PH₆PH₇

OMB No. 0535-0002
Approved Expires: 6/30/2013
Project Code 921 QDQ 2089021
SI-Means: 3218

U.S. Department of Agriculture
9700 Page Avenue, Suite 400
St. Louis, MO 63110-1547
Phone: 1-888-424-7323
Fax: 314-595-9990
E-mail: NCC-Administration -
NCCSI@nass.usda.gov

Please make corrections to name, address and zip code, if necessary.

Information requested in this survey is used to prepare estimates of selected agricultural commodities. Under Title 7 of the U.S. Code and CIPSEA (Public Law 107-347), facts about your operation are kept confidential and used only for statistical purposes in combination with similar reports from other producers. Response is voluntary.

According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a valid OMB control number. The valid OMB control number is 0535-0002. The time required to complete this information collection is estimated to average 5 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

- In 2013, how many acres will this operation:

a. Own?	+	901
b. Rent or Lease from others or use Rent Free? (Exclude land used on an animal unit month (AUM) basis, BLM and Forest Service land.)	+	902
c. Rent to others?	-	905
2. [Calculate item 1a + 1b - 1c.] Then the total acres operated in 2013 will be:	=	900

NASS – Survey Instrument

-2-

- In 2013, for the total RENTED or LEASED acres FROM OTHERS reported in Item 1b, will any cropland or pasture acres be for cash? (Exclude land rented/leased on a share basis, per head or AUM basis, free of charge, and rent/lease with buildings such as barns included in the rent/lease, BLM and Forest Service land.)

<input type="checkbox"/> YES - [Enter code 1 and continue]	<input type="checkbox"/> NO - [Enter code 3, and go to item 5]	Code
		3420
		Acres
		3421

 - How many acres of non-irrigated cropland will be rented or leased for cash? (Include acres cut and to be cut for hay)

Dollars per Acre	OR	Total Dollars
3422 \$		3522 \$
Acres		
3424		

 - What will be the cash rent/lease per acre or total dollars paid on the non-irrigated cropland?

Dollars per Acre	OR	Total Dollars
3423 \$		3523 \$
Acres		
3427		
 - How many acres of irrigated cropland will be rented or leased for cash? (Include fruit, nut, berry, vineyard, nursery, and hayland, and all other irrigated cropland.)

Dollars per Acre	OR	Total Dollars
3425 \$		3525 \$
Acres		
3427		
 - How many acres of permanent pasture, grazing or grassland will be rented/leased for cash? (Exclude Federal, State, and other types of land rented on an (AUM) basis, BLM and Forest Service land. Acres cut and to be cut for hay should be considered cropland and reported in item 3a or 3b.)

Dollars per Acre	OR	Total Dollars
3426 \$		3526 \$
Acres		
3427		
 - What will be the cash rent/lease per acre or total dollars paid on the permanent pasture, grazing or grassland?

Dollars per Acre	OR	Total Dollars
3426 \$		3526 \$
Acres		
3427		
 - In 2013, for the cropland and pasture acres rented or leased from others for cash (reported in items 3a, 3b, and 3c), were any acres rented or leased from relatives? (Include grandparents, parents, siblings, and children.)

<input type="checkbox"/> YES - [Enter code 1 and continue]	<input type="checkbox"/> NO - [Enter code 3, and go to item 5]	Code
		3600
		Acres
		3650

 - How many acres rented or leased from others for cash were from relatives?

Acres
3650

University Surveys - Methodology


- Mailed surveys
- Population is often a combination of ag bankers, professional farm managers, rural appraisers, farmers and other ag professionals
- Surveys typically ask participants to report their estimate of what land rent is per acre for 3 quality tiers of land (i.e. "top", "average", and "bottom" or "poor") in their area (county, region)
- Participants are also asked to report "typical" corn and soybean yields for each of the 3 tiers of land.

9

University Survey Instrument

Please return to:
Barry Ward
Leader, Production Business Mgt.
Dept. of AEDE
2120 Fyffe Rd.
Columbus, Ohio 43210

The Ohio State University
Department of Agricultural,
Environmental and Development
Economics



OHIO CROPLAND VALUES AND CASH RENTS — 2012-2013

1. County on which you are reporting: _____

2. Please indicate your **primary** type of work. Check one category that best describes your work:
 Appraiser Ag Leader Professional Farm Manager Farmer
 Extension FSA Government Service and FSA Sales Other

3. In the table below please give your estimate per acre:

Farmed Quality	Average		MARKET VALUE PER ACRE		RENTS PER ACRE	
	2012	2013	2012	2013	2012	2013
Top	bu/A	bu/A	\$	\$	\$	\$
Average	bu/A	bu/A	\$	\$	\$	\$
Poor	bu/A	bu/A	\$	\$	\$	\$
Transition ¹	XXXX		\$	\$		XXXX

¹ Long-term average (5 yr.) corn/soybean yields with typical farming practices.
² Acres where much of the land is owned by residential, commercial & industrial users.
 XXXX must be estimated in current or recent year.

4. From current levels, where do you expect Ohio top cropland prices to be 1 year from now?
 (Check and give percentage estimate where appropriate.)
 Up, by _____% No Change Down, by _____%

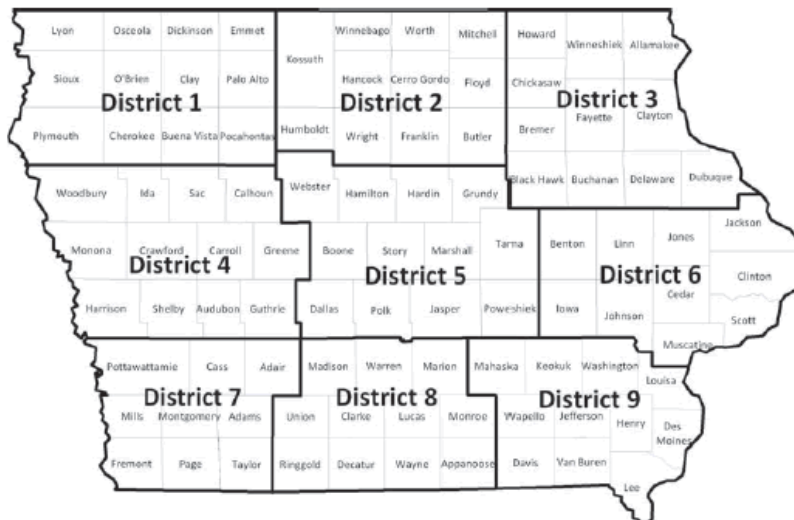
5. From current levels, where do you expect Ohio cash rents to be 5 years from now?
 (Check and give percentage estimate where appropriate.)
 Up, by _____% No Change Down, by _____%

10

Comparing the Two Surveys

- Recognize all counties in a University Survey Region
- From NASS survey data, use corresponding counties to calculate averages for that district/region
- Compare the University Survey district “average tier” to the corresponding counties average from the NASS survey.

11



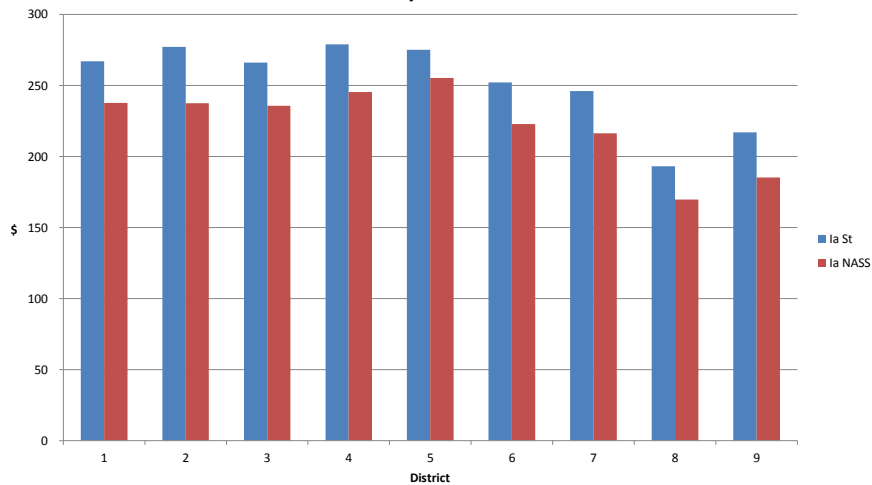
12

Iowa Data

		Iowa State 2012	Iowa NASS 2012	
		"Average Tier"	Average	Difference
District	1	267	238	\$29
District	2	277	237	\$40
District	3	266	236	\$30
District	4	279	245	\$34
District	5	275	255	\$20
District	6	252	223	\$29
District	7	246	216	\$30
District	8	193	170	\$23
District	9	217	185	\$32

13

Iowa St. vs. Iowa NASS - Rent/Ac - 2012



14



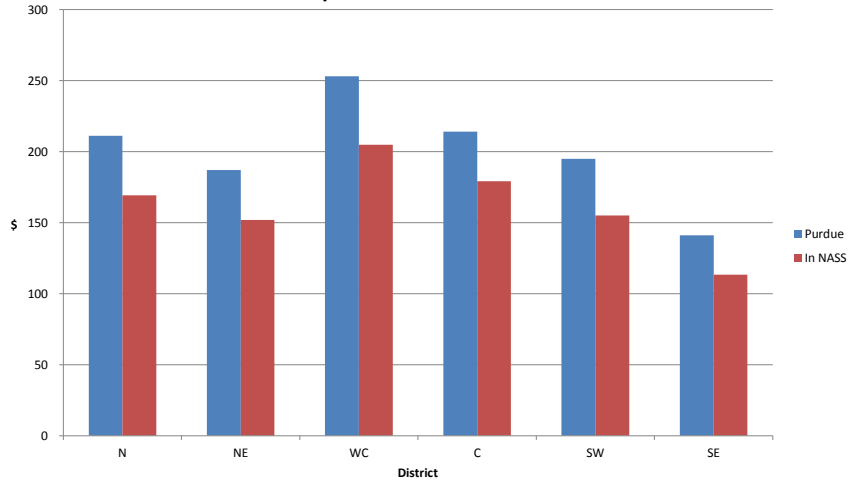
15

Indiana Data

		Purdue 2012 "Average Tier"	Indiana NASS 2012 Average	Difference
District	N	211	169	\$42
District	NE	187	152	\$35
District	WC	253	205	\$48
District	C	214	179	\$35
District	SW	195	155	\$40
District	SE	141	113	\$28

16

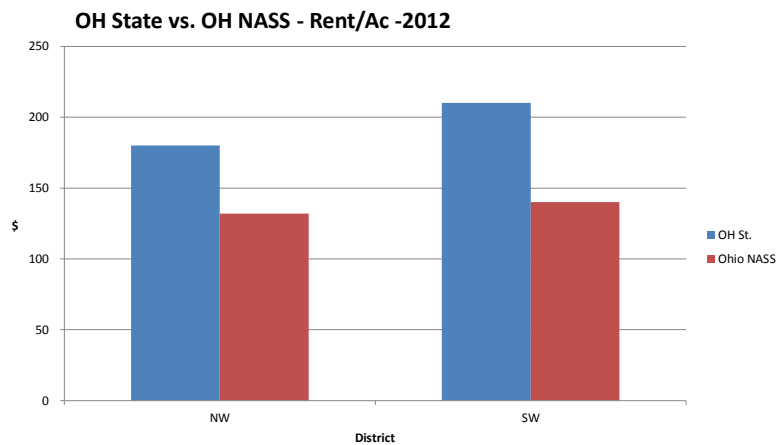
Purdue vs. IN NASS - Rent/Ac - 2012



Ohio Data

		Ohio State 2012	OH NASS 2012	
		"Average Tier"	Average	Difference
District	NW	180	132	\$48
District	SW	210	140	\$70

19



20

Ohio Data – Differences by Year

		Ohio State vs. Ohio NASS			
		Differences by Year			
		2009	2010	2011	2012
District	NW	\$18.83	\$31.50	\$43.36	\$48.06
District	SW	\$41.53	\$50.82	\$70.10	\$69.63

21

Why the Differences?

- Is the comparison valid?
- Survey Question Differences
- Population Differences
- Timing Differences
- NASS includes “friendly” lease rates?
- University Surveys are opinion surveys.
Respondents may be biased by headline grabbers.
- What motivates farmers to complete questionnaire?

22

I live in on River Road in Mad River Township in Champaign County – What should my cash rent be?

Ways to Use The Survey Data in Education

- Inform clients of both sets of survey data
- Inform clients of methodology differences

- Use this to inform clients about:
 - The Need for Written leases
 - Flexible cash lease options
 - A Landowner’s need to educate themselves
 - A Farmer’s need to communicate, share

 23

Producers Advantage - Information

- Farmers have detailed production knowledge, yield and profit data
- Non-farming landowners often have little production knowledge and little to no yield and profit data so...
- Even armed with a set of cash rent survey data, little to no knowledge of the farm’s production capabilities leaves a landowner relatively unarmed.
- Some landowners are including data sharing to be included in the written lease agreement
 - Yield data, fertility data, cost data, profit data

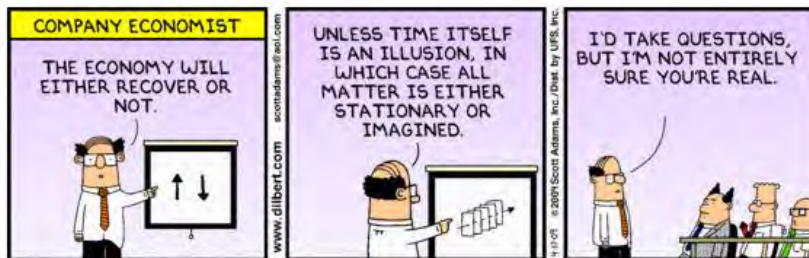
 24

Producers Potential Disadvantage – “Normalizing” Profits Managing Rapidly Increasing Cash Rents

- Negotiate rents at or near the market
 - Communicating with Landowners of the potential for Returns to “normalize” and rents to decrease...
- Communicate the value of non-cash benefits to the landowner
- Strengthen Balance Sheet to survive a reversal
- Flexible cash leases

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25

Source: [Dilbert](#)

- ◆ Barry Ward (614) 688-3959
- ◆ ward.8@osu.edu
- ◆ <http://aede.osu.edu/our-people/barry-ward>
- ◆ <http://aede.osu.edu/research/osu-farm-management>

26

Flex Lease #1 Cash Lease with a Bonus Approach

- Tenant and Landowner agree on:
 - Base Rent (and Max Rent?)
 - Base Gross Revenue (Tenant Cost of Prod?)
 - How to calculate and Verify Actual Year-End Revenue
 - Yield and Price verification
 - How (Actual Revenue – Base Revenue) is shared? What %?

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27

Flex Lease #1 Cash Lease with a Bonus Approach

- Example:
- Base Rent: **\$179** (Max: \$250)
- Base Revenue: **\$825** (150bpa*\$5.50/bu.)
- Excess revenue shared: **33%** to landowner
- Actual Revenue: **\$975** (150bpa*\$6.50)
- Bonus: $(\$975 - \$825) * 33\% = \mathbf{\$50}$
- Total Cash Lease Amount: $\$179 + \$50 = \mathbf{\$229/acre}$

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28

Flex Lease #2

Percent of Gross Income Approach

- Tenant and Landowner agree on:
 - Base Rent (and Max Rent?)
 - How to calculate and Verify Actual Year-End Revenue
 - Yield and Price verification
 - Percent of gross income as rent

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29

Flex Lease #2

Percent of Gross Income Approach

- Example:
- Base Rent: **\$195**
- Percent of Gross Income as Rent:
 - Corn - **27%**
 - Soybeans - **35%**
- Actual Revenue:
 - Corn - **\$825** (150bpa*\$5.50)
 - Soybeans – **\$625** (50bpa*\$12.50)
- Rent:

Corn -	$\$975 \times 27\% =$	\$223/a
Soybeans -	$\$625 \times 35\% =$	\$219/a

6/12/2013

30