Members

Sen. Jean Leising, Chairperson
Sen. Greg Walker
Sen. John Waterman
Sen. Lindel Hume
Sen. Richard Young
Sen. Timothy Skinner
Rep. Don Lehe, Vice-Chairperson
Rep. Steve Davisson
Rep. Douglas Gutwein
Rep. Phillip Pflum
Rep. Mary Ann Sullivan
Rep. Dale Grubb

INTERIM STUDY COMMITTEE ON AGRICULTURE

Legislative Services Agency
200 West Washington Street, Suite 301
Indianapolis, Indiana 46204-2789
Tel: (317) 233-0696 Fax: (317) 232-2554

LSA Staff:

Francine Rowley-Lacy, Attorney for the Committee
Jessica Harmon, Fiscal Analyst for the Committee

Authority: *P.L. 86-2012*

MEETING MINUTES[1]

Meeting Date:	**September 26, 2012**
Meeting Time:	**1:00 P.M.**
Meeting Place:	**State House, 200 W. Washington St., Room 431**
Meeting City:	**Indianapolis, Indiana**
Meeting Number:	**2**

Members Present: **Sen. Jean Leising, Chairperson; Sen. Greg Walker; Sen. Lindel Hume; Sen. Richard Young; Rep. Don Lehe, Vice-Chairperson; Rep. Steve Davisson; Rep. Dale Grubb.**

Members Absent: **Sen. John Waterman; Sen. Timothy Skinner; Rep. Douglas Gutwein; Rep. Phillip Pflum; Rep. Mary Ann Sullivan.**

Senator Leising called the meeting to order at 1:10 p.m. Committee members introduced themselves. Dr. Larry DeBoer, Purdue University, was called upon to present information concerning farm land valuation. He explained that the assessed value of farmland is equal to the base rate per acre of farmland (this rate is calculated each year by the Department of Local Government Finance (DLGF) and is based on rents, yields, commodity prices, costs and interest rates) times the acre's soil productivity factor (this factor accounts for variations in quality of farmland) adjusted by its influence factor (this factor is based on characteristics of the farmland like frequent flooding or forest cover), if any. The assessed value of farm land is the product of the base rate, the soil factor, and an influence factor.

---

[1] These minutes, exhibits, and other materials referenced in the minutes can be viewed electronically at http://www.in.gov/legislative Hard copies can be obtained in the Legislative Information Center in Room 230 of the State House in Indianapolis, Indiana. Requests for hard copies may be mailed to the Legislative Information Center, Legislative Services Agency, West Washington Street, Indianapolis, IN 46204-2789. A fee of $0.15 per page and mailing costs will be charged for hard copies.

The farm land assessment provides the basis for setting the property tax bill. (Exhibits A & B)

Dr. DeBoer stated that property taxes on farm land have been rising and will likely continue to rise in the future because of a few factors, including:

(1) The increase in the base rate of farm land, which is the statewide starting point for farm land assessed values. The base rate was $1,290 per acre for taxes payable in 2011. It will be $1,500 for taxes in 2012, and it will be $1,630 for taxes in 2013.
(2) The increase in soil productivity factors, which measure the productivity of the soil for growing corn, based on corn yields by soil type. The soil factors in the past have varied from 0.5 to 1.28. For taxes in 2013, the range for the new factors is 0.5 to 1.66.
(3) The property tax cap for properties other than farmland.

In response to Committee members' questions, Dr. DeBoer explained that farm land property taxes will not be impacted by the drought that happened this year (2012) until assessment year 2015, tax year 2016, because the data used in the formula to calculate farm land property taxes is based on:

(1) data over a 4 year period (i.e. data is averaged); and
(2) the Natural Resources Conservation Service (NRCS) guidelines.

In further response to Committee members' questions, Dr. DeBoer stated that Indiana is not bound by the NRCS's guidelines and that at least 2 years worth of data is needed to calculate farmland property taxes. He also responded to questions by stating that unless the General Assembly takes action, many farmers will see their taxes increase up to 50% or more for the upcoming tax years 2012 and 2013.

Bob Walmer, Insurance Agent, Goshert Insurance, presented information concerning crop insurance. Mr. Walmer gave a brief history of crop insurance and an overview of current crop insurance coverage and types. (Exhibit C) He stated that approximately 70% of Indiana farmers currently have at least some type of crop insurance coverage. In response to Committee members' questions, Mr. Walmer explained that the drought this year will likely cause a spike in insurance claims and may cause many claims to not be addressed before the end of 2012. He stated that any claim that is $200,000 or more will trigger a federal audit that will cause some claims to not be addressed until well into 2013. He also stated that there are insurance policies available to cover hail damage for those farmers who sell produce at farmers markets.

Don Villwock, Indiana Farm Bureau, gave remarks on farm insurance coverage in Indiana and the impact of the drought on Indiana farmers. He stated that the drought this year was devastating to livestock and dairy producers in Indiana and it caused a low feed supply.

In response to Committee members' concerns regarding the effect of the drought on the low feed supply and the presence of toxins in grains like aflatoxins, a naturally occurring toxic substance, Sara Simpson, Indiana Department of Agriculture (IDOA), advised the Committee that the U.S. Food and Drug Administration (FDA) recently approved a request from IDOA to allow grain handlers to blend corn contaminated by aflatoxins with other grains to make animal feed. She stated that the approval from the FDA will give farmers more flexibility in feeding livestock at a time of limited feed supply.

Katrina Hall, Indiana Farm Bureau, gave an overview of soil productivity factors and their effect on farmland property taxes. (Exhibit D) Soil productivity factors compare the productive potential of one soil to another, rank soil based on productive properties, and relate productive potential of soil. Physical properties of soil such as:

(1) slope;
(2) moisture holding capacity;
(3) depth of rooting;
(4) amount of surface soil remaining; and
(5) organic matter content;

help define the rating that a piece of land receives.

Ms. Hall stated that Indiana has made progress in the formula used to assess farmland, but further work should be done. She explained how soil maps are used to assign a productivity rating that is based on corn yield estimates. The more productive the soil, the higher the rating. The best soil in Indiana has a productivity factor of approximately 1.28; the poorest soil has a productivity factor of .50. Ms. Hall also discussed her concerns with the new soil productivity factors adopted by the Indiana Department of Local Government Finance (DLGF) this year. Her concerns are listed below:

(1) The new productivity factors are based on increased yields that are already reflected in the farmland base value.
(2) The new productivity factors changed without any input from the agricultural community or notice to the county assessors.
(3) The new productivity factors are based on higher predicted yields that were not determined based on scientific data.
(4) The new productivity factors were not uniformly updated across the state of Indiana.

In response to Committee members' concerns on why new calculations for soil productivity were instituted by the NRCS and then adopted by DLGF, Ms. Hall stated that the soil maps that are used in the calculations were changed because of refined definitions for soil types and how yield is assigned to certain types of soil. She also stated that she was not sure if soil productivity factors should be changed unless the methodology used is based on objective identifiable data.

Robert Sigalow, Indiana Legislative Services Agency (LSA) , gave a detailed analysis of the new soil productivity factors released on February 2, 2012, by DLGF. He explained how the new soil productivity factors were introduced into the LSA's property tax model to estimate the resulting tax shift for taxes payable in 2013. (Exhibit E)

After Committee discussion on the merits of the new soil productivity factors adopted by DLGF, the new soil mapping by NRCS, and whether soil productivity factors should be frozen at the current rates, Senator Leising advised the Committee members that the Commission on State Tax Financing and Policy (Commission) will likely discuss these issues at a meeting in October and that a request to have a joint meeting with the Commission to join the discussion will be made to the Chairman of the Commission.

With no further business to discuss, the meeting was adjourned at 4:20 p.m.

Purdue Cooperative Extension Service

Soil Productivity Factors and Farmland Assessment

Larry DeBoer
Purdue University
September 26, 2012

Interim Study Committee on Agriculture-Meeting 9/26/2012

Exhibit A

Farmland Property Taxes

- Assessed Value of Farmland
  - Equals the base rate per acre of farmland
    - *Base rate calculated each year by the Department of Local Government Finance based on rents, yields, commodity prices, costs and interest rates*
  - Times the acre's soil productivity factor
    - *Accounts for variations in quality of farmland*
  - Less its influence factor, if any
    - *Reduce assessments for characteristics like frequent flooding or forest cover*

Farmland Property Taxes

- Assessed Value of Farmland
  - Equals the base rate per acre of farmland
    - *Base rate calculated each year by the Department of Local Government Finance based on rents, yields, commodity prices, costs and interest rates*
  - Times the acre's soil productivity factor
    - *Accounts for variations in quality of farmland*
  - Less its influence factor, if any
    - *Reduce assessments for characteristics like frequent flooding or forest cover*

Calculation of the Base Rate for an Acre of Farmland

Assessment Year 2010; Tax Year 2011

	NET INCOMES			MARKET VALUE IN USE		
Year	Cash Rent	Operating	Cap. Rate	Cash Rent	Operating	Average
2002	105	20	7.02%	1,496	285	890
2003	106	71	6.29%	1,685	1,129	1,407
2004	104	135	6.35%	1,638	2,126	1,882
2005	110	59	7.22%	1,524	817	1,170
2006	110	74	8.18%	1,345	905	1,125
2007	122	184	7.94%	1,537	2,317	1,927

Average Market Value in Use **$1,290**

Calculation of the Base Rate for an Acre of Farmland

Assessment Year 2011; Tax Year 2012

	NET INCOMES			MARKET VALUE IN USE		
Year	Cash Rent	Operating	Cap. Rate	Cash Rent	Operating	Average
2003	106	71	6.29%	1,685	1,129	1,407
2004	104	135	6.35%	1,638	2,126	1,882
2005	110	59	7.22%	1,524	817	1,170
2006	110	74	8.18%	1,345	905	1,125
2007	122	184	7.94%	1,537	2,317	1,927
2008	140	189	6.56%	2,134	2,881	2,508

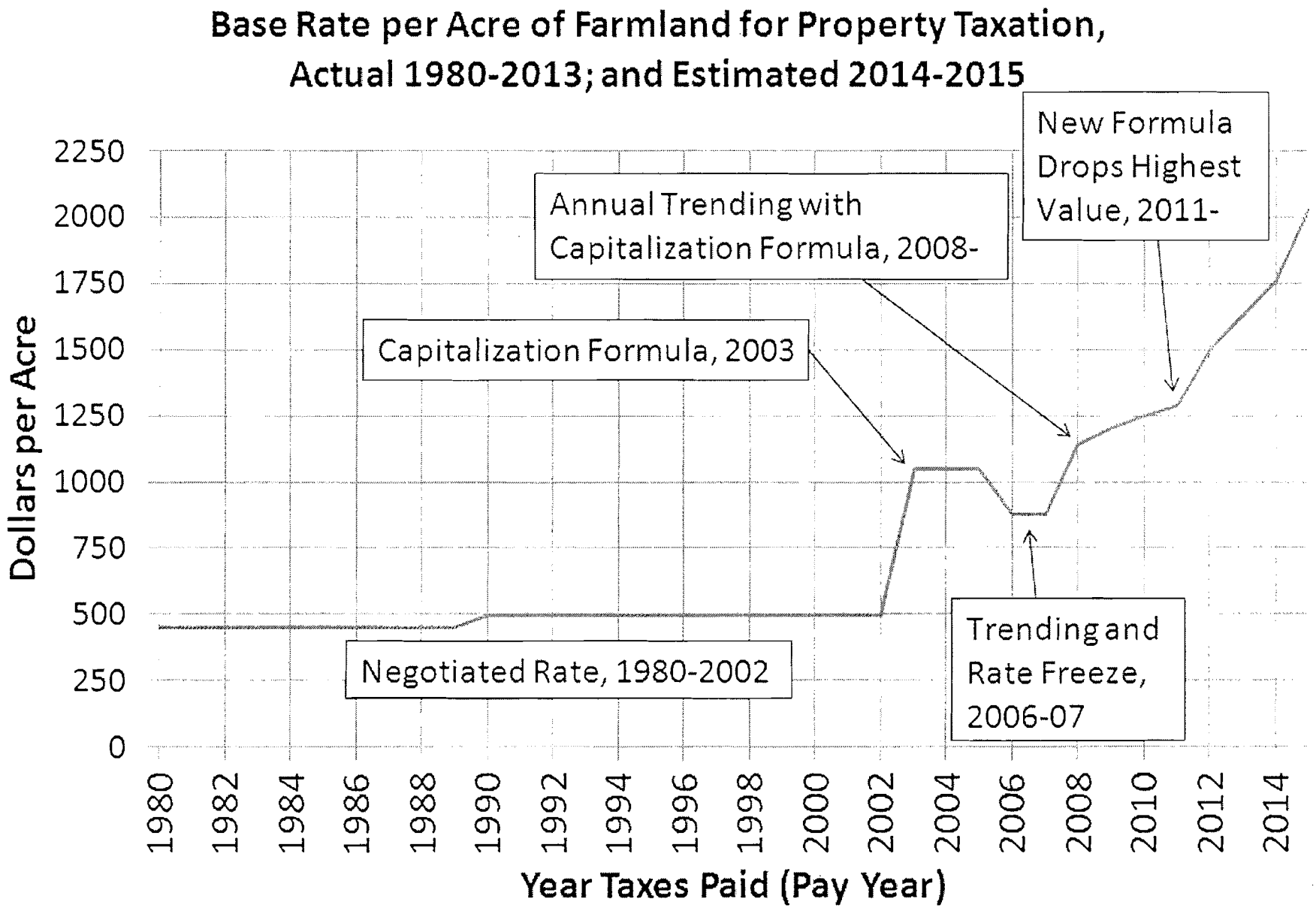
Average Market Value in Use **$1,500**

Calculation of the Base Rate for an Acre of Farmland

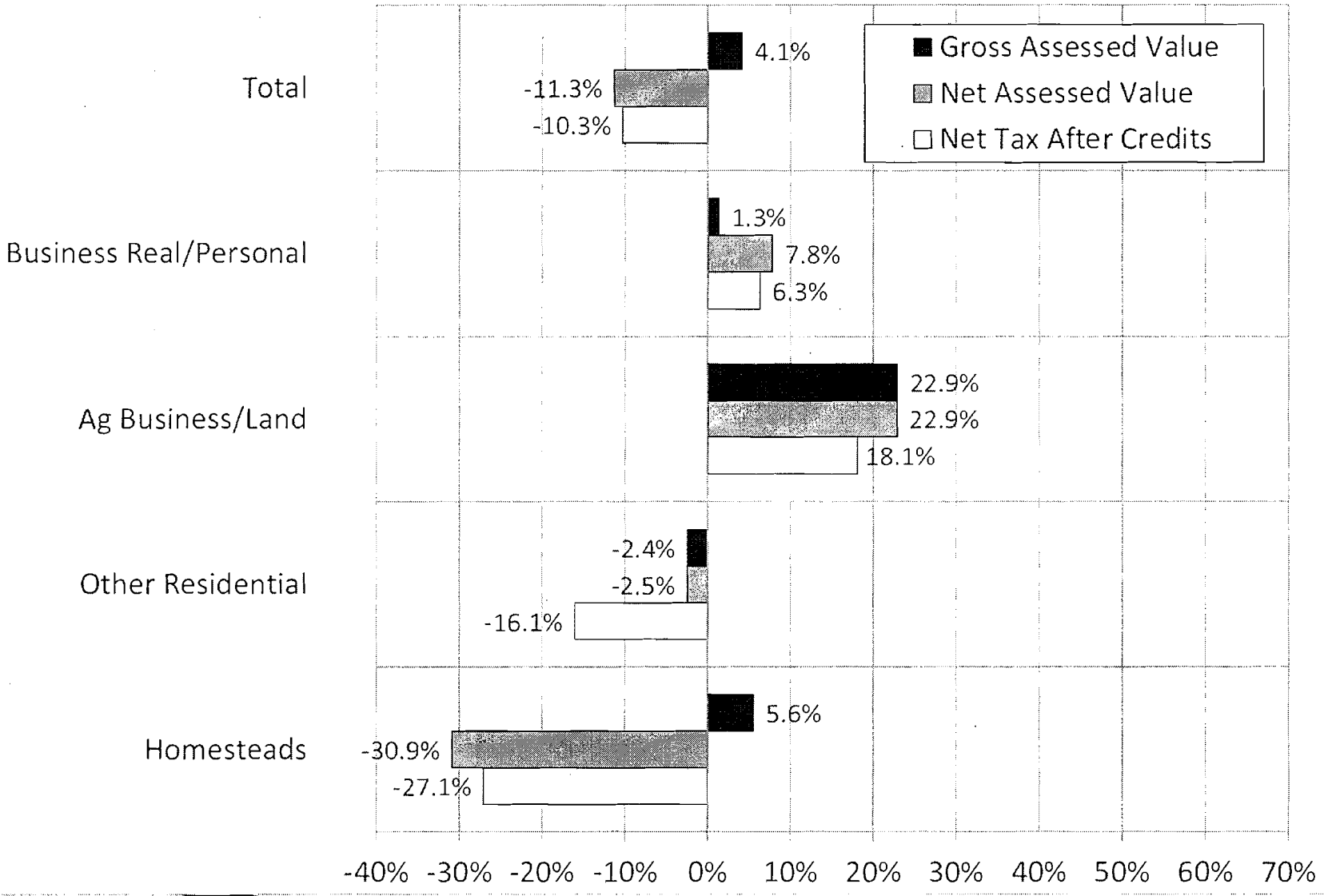
Assessment Year 2012; Tax Year 2013

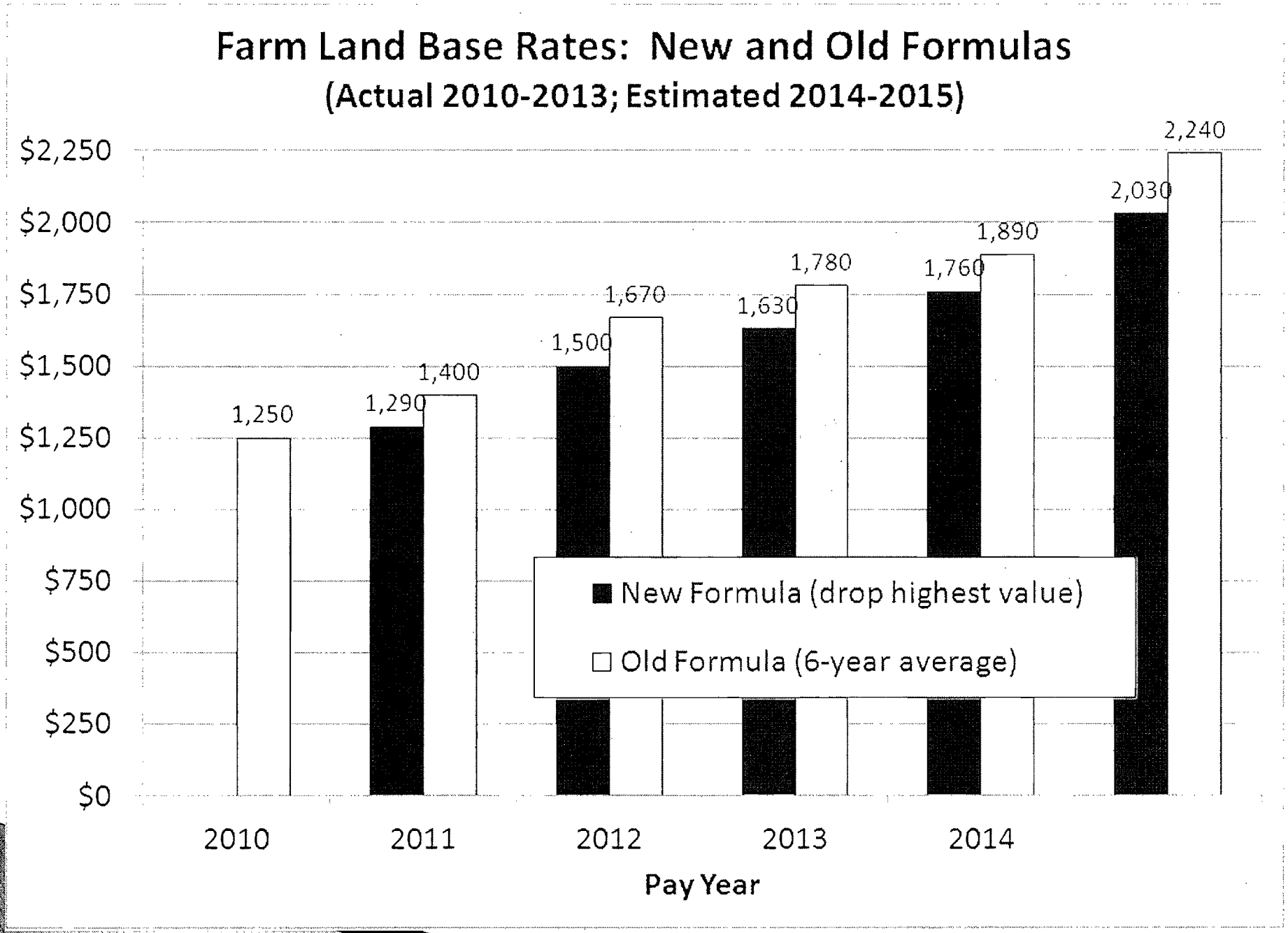
	NET INCOMES			MARKET VALUE IN USE		
Year	Cash Rent	Operating	Cap. Rate	Cash Rent	Operating	Average
2004	104	135	6.35%	1,638	2,126	1,882
2005	110	59	7.22%	1,524	817	1,170
2006	110	74	8.18%	1,345	905	1,125
2007	122	184	7.94%	1,537	2,317	1,927
2008	140	189	6.56%	2,134	2,881	2,508
2009	139	116	6.17%	2,253	1,880	2,066

Average Market Value in Use **$1,630**


Base Rate per Acre of Farmland for Property Taxation, Actual 1980-2013; and Estimated 2014-2015
Dollars per Acre
2250
2000
1750
1500
1250
1000
750
500
250
0
1980
1982
1984
1986
1988
1990
1992
1994
1996
1998
2000
2002
2004
2006
2008
2010
2012
2014
Year Taxes Paid (Pay Year)
New Formula Drops Highest Value, 2011-
Annual Trending with Capitalization Formula, 2008-
Capitalization Formula, 2003
Negotiated Rate, 1980-2002
Trending and Rate Freeze, 2006-07

Indiana Total Property Taxes, 2007-2011




Farm Land Base Rates: New and Old Formulas
(Actual 2010-2013; Estimated 2014-2015)
$2,250
$2,000
$1,750
$1,500
$1,250
$1,000
$750
$500
$250
$0
1,250
1,290
1,400
1,500
1,670
1,630
1,780
1,760
1,890
2,030
2,240
New Formula (drop highest value)
Old Formula (6-year average)
2010
2011
2012
2013
2014
Pay Year

Farmland Property Taxes

- <u>Assessed Value of Farmland</u>
  - Equals the base rate per acre of farmland
    - *Base rate calculated each year by the Department of Local Government Finance based on rents, yields, commodity prices, costs and interest rates*
  - Times the acre's soil productivity factor
    - *Accounts for variations in quality and value of farmland*
  - Less its influence factor, if any
    - *Reduce assessments for characteristics like frequent flooding or forest cover*

Department of Local Government Finance, "Soil Productivity Factor Update," February 2, 2012

STATE OF INDIANA

DEPARTMENT OF LOCAL GOVERNMENT FINANCE

INDIANA GOVERNMENT CENTER NORTH
100 NORTH SENATE AVENUE N1058(B)
INDIANAPOLIS, IN 46204
PHONE (317) 232-3777
FAX (317) 232-8779

TO: Assessing Officials

FROM: Barry Wood, Assessment Division Director

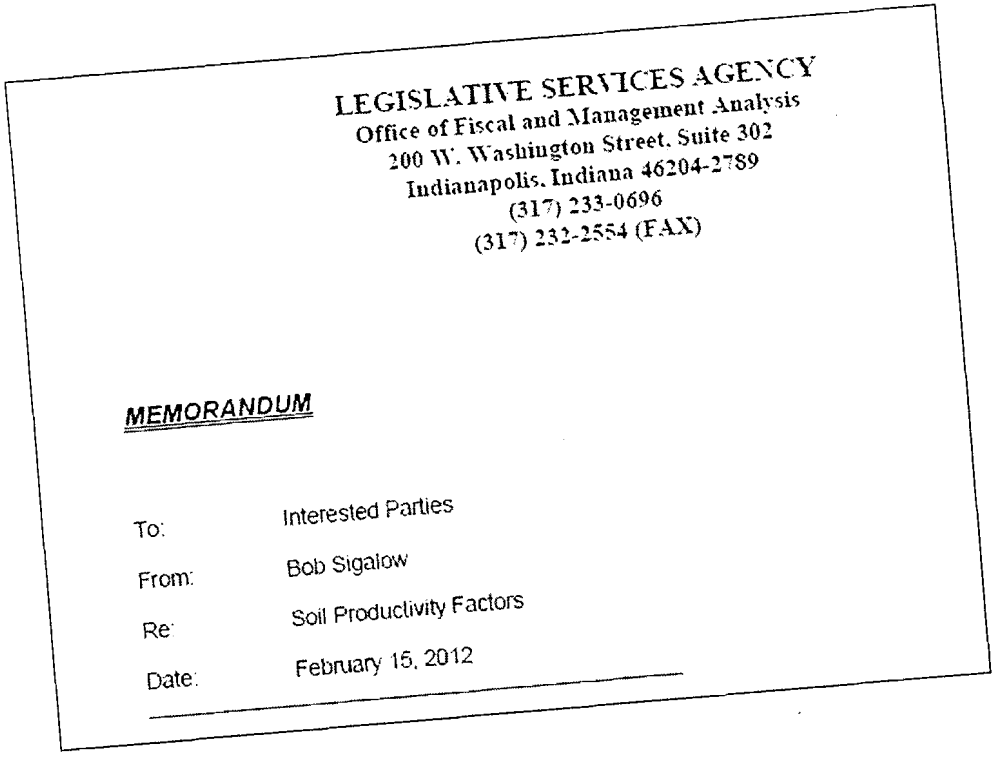
RE: Soil Productivity Factor Update

DATE: February 2, 2012

"The Department of Local Government Finance recently requested and received updated Soil Productivity Factors from the Natural Resources Conservation Service. . . ."

"The best soil productivity in the state is now approximately 1.66 (changed from 1.28), while the poorest remains 0.50."

Legislative Services Agency, "Soil Productivity Factors," February 15, 2012



LEGISLATIVE SERVICES AGENCY
Office of Fiscal and Management Analysis
200 W. Washington Street, Suite 302
Indianapolis, Indiana 46204-2789
(317) 233-0696
(317) 232-2554 (FAX)

MEMORANDUM

To: Interested Parties

From: Bob Sigalow

Re: Soil Productivity Factors

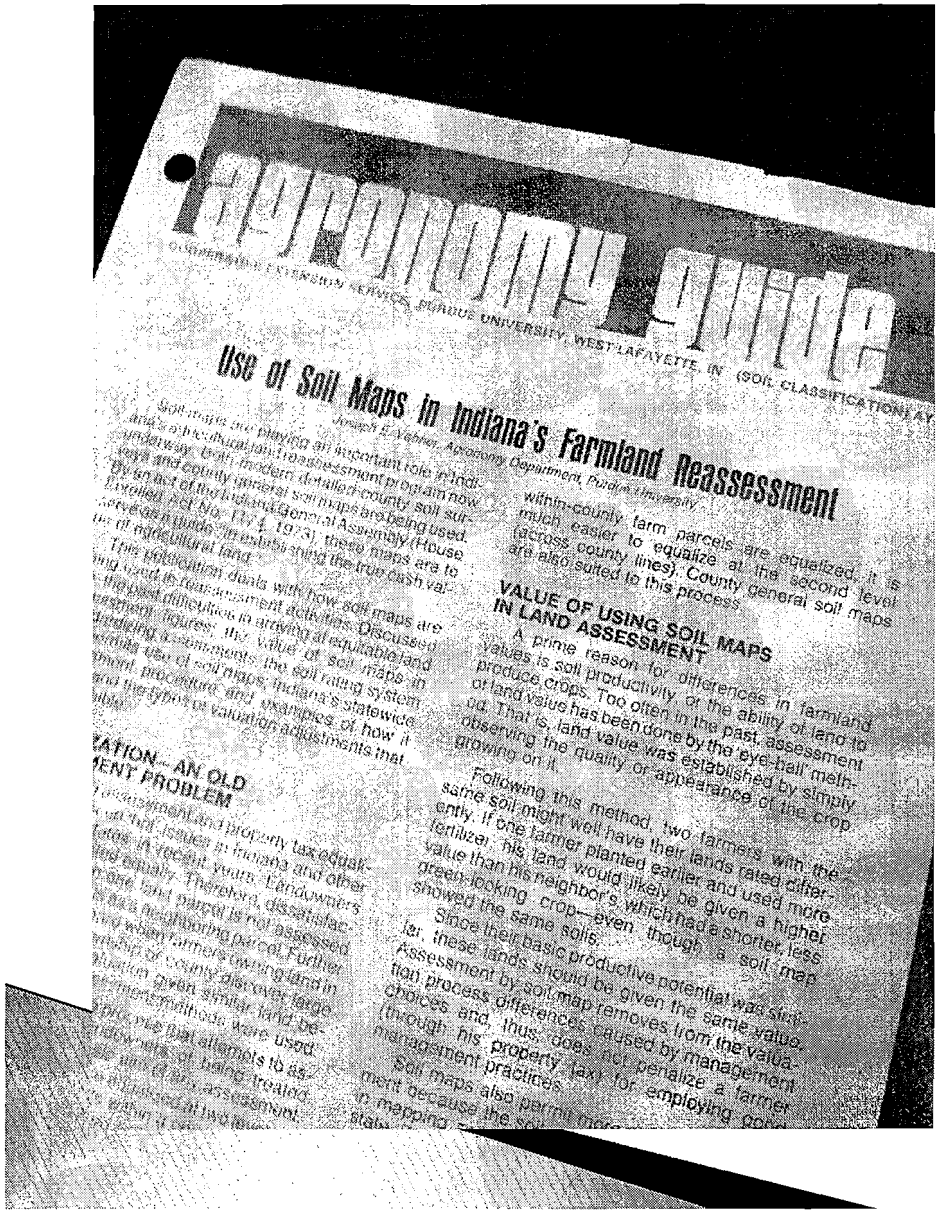
Date: February 15, 2012

"The Pay 2012 soil productivity factors range from 0.5 to 1.28 with an acreage-weighted average of 0.958. The Pay 2013 factors will range from 0.5 to 1.66 with a weighted average of 1.203, or a 25.5% increase in the average."

Department of Local Government Finance, Real Property Assessment Guidelines, Chapter 2 "Land".

"The productivity factor for a soil map unit is calculated by dividing the estimated 10-year average corn yield (calculated in bushels per acre) by 100. Productivity factors do not accurately predict the actual yields for a particular year since weather has a great influence on actual yields. However, you can think of the soil productivity index as a relative ranking of soil map units. The more productive the soil, the higher the rating. The best soil in the state has a productivity factor of approximately 1.28; the poorest soil has a productivity factor of .50." (pp. 95-96)

Use of Soil Maps in Indiana's Farmland Reassessment, March 1979



agronomy guide

PURDUE UNIVERSITY, WEST LAFAYETTE, IN

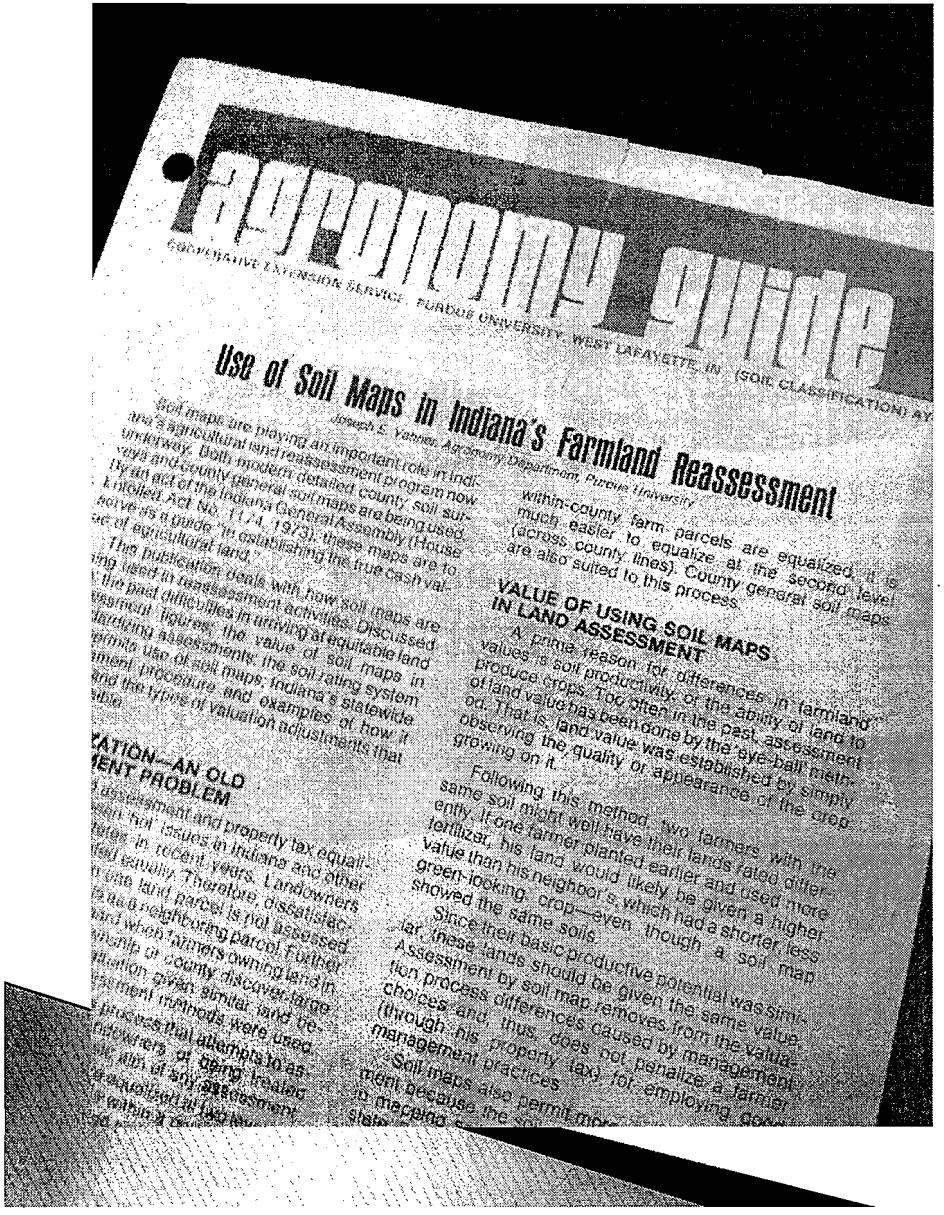
Use of Soil Maps in Indiana's Farmland Reassessment

VALUE OF USING SOIL MAPS IN LAND ASSESSMENT

"Too often in the past, assessment of land value has been done by the 'eye-ball' method. That is, land value was established by simply observing the quality or appearance of the crop growing on it."

"Assessment by soil map removes from the valuation process differences caused by management choices and, thus, does not penalize a farmer (through his property tax) for employing good management practices."

Use of Soil Maps in Indiana's Farmland Reassessment, March 1979



agronomy guide

COOPERATIVE EXTENSION SERVICE · PURDUE UNIVERSITY · WEST LAFAYETTE, IN · (SOIL CLASSIFICATION) AY

Use of Soil Maps in Indiana's Farmland Reassessment

Joseph E. Yahner, Agronomy Department, Purdue University

Soil maps are playing an important role in Indi-
ana's agricultural land reassessment program now
underway. Both modern detailed county soil sur-
veys and county general soil maps are being used.
By an act of the Indiana General Assembly (House
Enrolled Act No. 1174, 1973), these maps are to
serve as a guide "in establishing the true cash val-
ue of agricultural land."

This publication deals with how soil maps are
being used in reassessment activities, discusses
the past difficulties in arriving at equitable land
assessment figures, the value of soil maps in
deriving assessments, the soil rating system
permits use of soil maps, Indiana's statewide
assessment procedure and examples of how it
and the types of valuation adjustments that
apply.

ATION—AN OLD MENT PROBLEM

assessment and property tax equali-
been hot issues in Indiana and other
tates in recent years. Landowners
ted equality. Therefore, dissatisfac-
n one land parcel is not assessed
as a neighboring parcel. Further,
and when farmers owning land in
ship or county discover large
uation given similar land be-
ment methods were used,
processes that attempts to as-
owners of farm land
the aim of any assessment
a equitable tax base
within a county

within-county farm parcels are equalized, it is
much easier to equalize at the second level
(across county lines). County general soil maps
are also suited to this process.

VALUE OF USING SOIL MAPS IN LAND ASSESSMENT

A prime reason for differences in farmland
values is soil productivity, or the ability of land to
produce crops. Too often in the past, assessment
of land value has been done by the "eye-ball meth-
od." That is, land value was established by simply
observing the quality or appearance of the crop
growing on it.

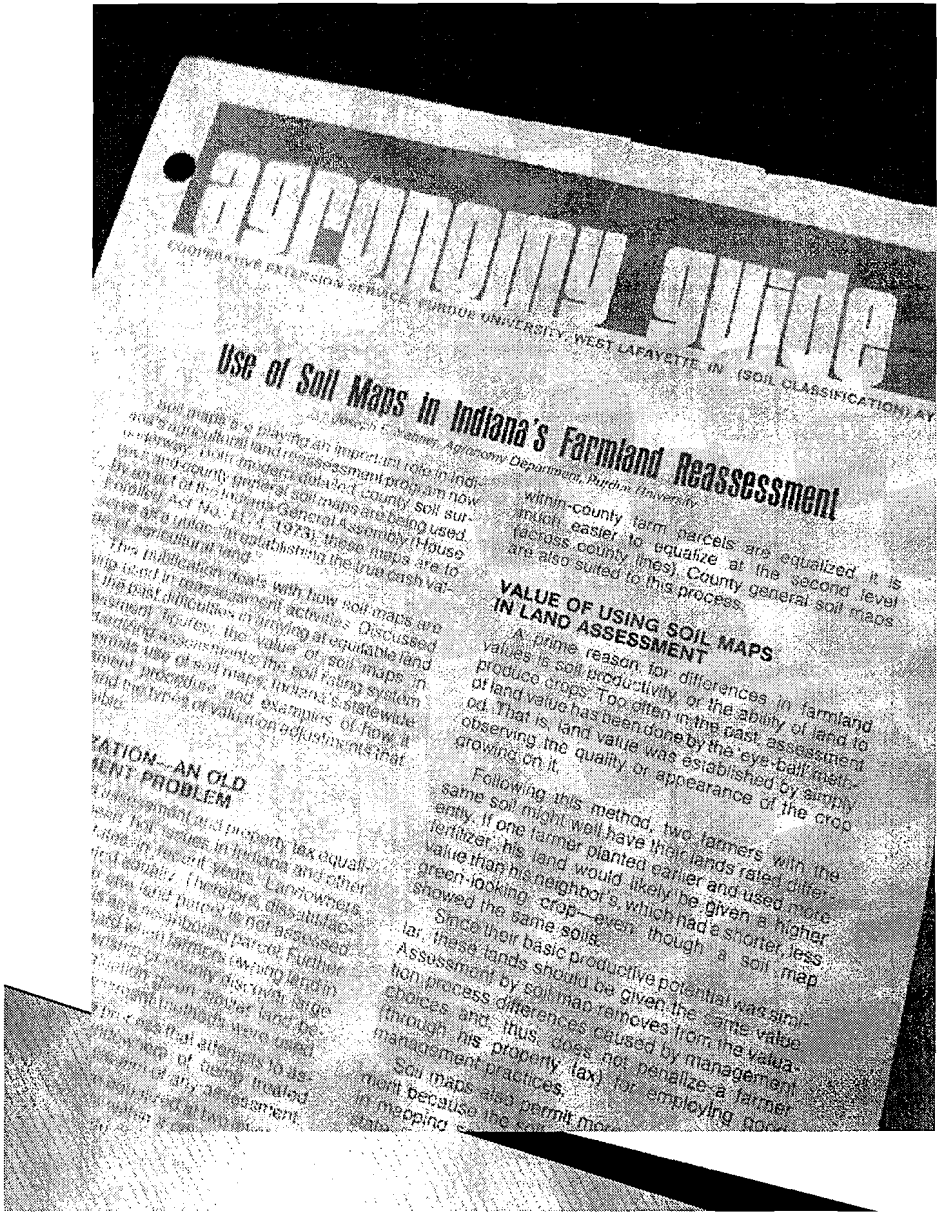
Following this method, two farmers with the
same soil might well have their lands rated differ-
ently. If one farmer planted earlier and used more
fertilizer, his land would likely be given a higher
value than his neighbor's, which had a shorter, less
green-looking crop—even though a soil map
showed the same soils.

Since their basic productive potential was simi-
lar, these lands should be given the same value.
Assessment by soil map removes from the valua-
tion process differences caused by management
choices and, thus, does not penalize a farmer
(through his property tax) for employing good
management practices.

Soil maps also permit more
ment because the
to depend
state

"These yield estimates are for an 'average management level' and are meant to reflect corn yields obtained over a number of years, in order to even out the effect of varying weather and other seasonal influences"

Use of Soil Maps in Indiana's Farmland Reassessment, March 1979



agronomy guide

COOPERATIVE EXTENSION SERVICE, PURDUE UNIVERSITY, WEST LAFAYETTE, IN (SOIL CLASSIFICATION) AY

Use of Soil Maps in Indiana's Farmland Reassessment

J. Joseph Chatmer, Agronomy Department, Purdue University

within-county farm parcels are equalized, it is much easier to equalize at the second level (across county lines). County general soil maps are also suited to this process.

VALUE OF USING SOIL MAPS IN LAND ASSESSMENT

A prime reason for differences in farmland values is soil productivity, or the ability of land to produce crops. Too often in the past assessment of land value has been done by the 'eye-ball' method. That is, land value was established by simply observing the quality or appearance of the crop growing on it.

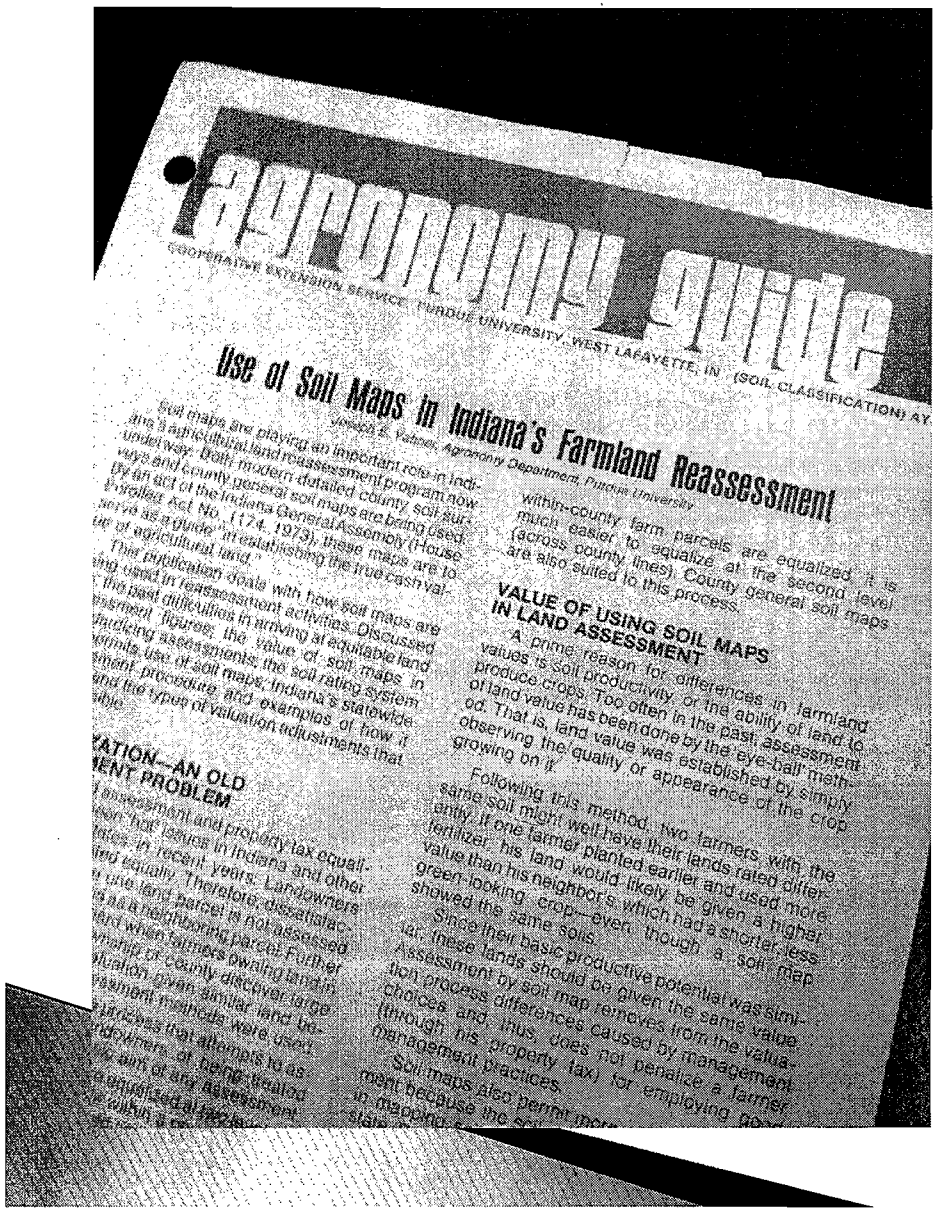
Following this method, two farmers with the same soil might well have their lands rated differently. If one farmer planted earlier and used more fertilizer, his land would likely be given a higher value than his neighbor's, which had a shorter, less green-looking crop—even though a soil map showed the same soils.

Since their basic productive potential was similar, these lands should be given the same value. Assessment by soil map removes from the valuation process differences caused by management choices and, thus, does not penalize a farmer through his property (tax) for employing more management practices.

Soil maps also permit more

"It is important to remember that, for equitable rating of farmland, the absolute yield value used is not as important as insuring that Indiana's soils are rated correctly relative to one another. If the relative yield ratings are correct, then the relative ratings of farmland parcels will be the same, regardless of the absolute yield values used."

Use of Soil Maps in Indiana's Farmland Reassessment, March 1979



agronomy guide

COOPERATIVE EXTENSION SERVICE, PURDUE UNIVERSITY, WEST LAFAYETTE, IN (SOIL CLASSIFICATION) AY

Use of Soil Maps in Indiana's Farmland Reassessment

Joseph E. Palmer, Agronomy Department, Purdue University

Soil maps are playing an important role in Indiana's agricultural land reassessment program now under way. Both modern detailed county soil surveys and county general soil maps are being used by an act of the Indiana General Assembly (House Enrolled Act No. 1174, 1973), these maps are to serve as a guide "in establishing the true cash value of agricultural land."

This publication deals with how soil maps are being used in reassessment activities. Discussed are the past difficulties in arriving at equitable land assessment figures; the value of soil maps in predicting assessments; the soil rating system; permits use of soil maps in Indiana's statewide assessment procedure; and examples of how it and the type of valuation adjustments that are possible.

ATION—AN OLD ENT PROBLEM

assessment and property tax equal- are "hot" issues in Indiana and other states. In recent years, Landowners ted equally. Therefore, dissatisfac- the same land parcel is not assessed as a neighboring parcel. Further and when farmers owning land in ership of county discover large tuation given similar land be- sessment methods were used. ances that attempts to as- landowners of being treated the part of any assessment

within-county farm parcels are equalized. It is much easier to equalize at the second level (across county lines). County general soil maps are also suited to this process.

VALUE OF USING SOIL MAPS IN LAND ASSESSMENT

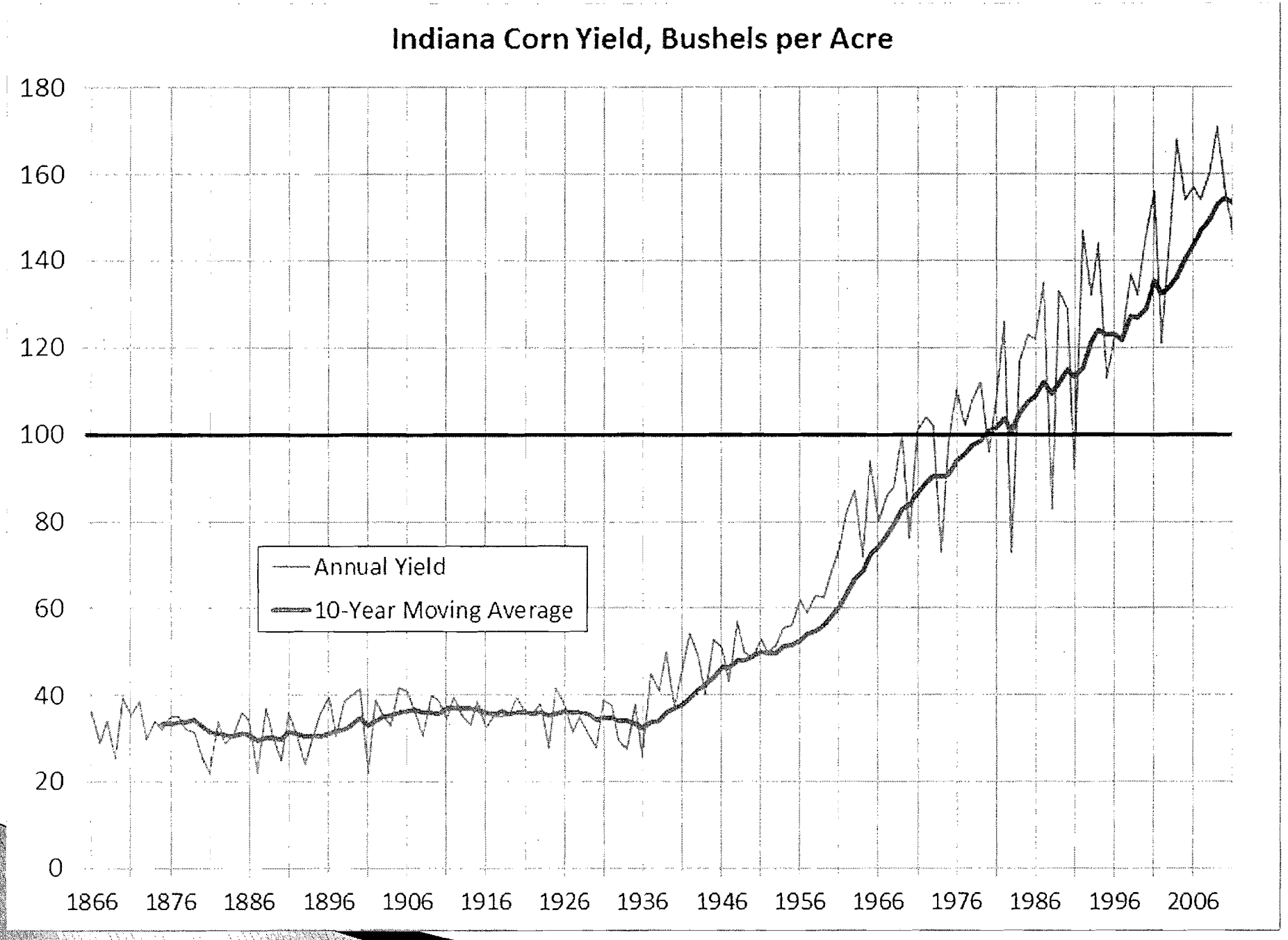
A prime reason for differences in farmland values is soil productivity, or the ability of land to produce crops. Too often in the past, assessment of land value has been done by the "eye-ball" method. That is, land value was established by simply observing the quality or appearance of the crop growing on it.

Following this method, two farmers with the same soil might well have their lands rated differently. If one farmer planted earlier and used more fertilizer, his land would likely be given a higher value than his neighbor's, which had a shorter, less-green-looking crop—even though a soil map showed the same soils.

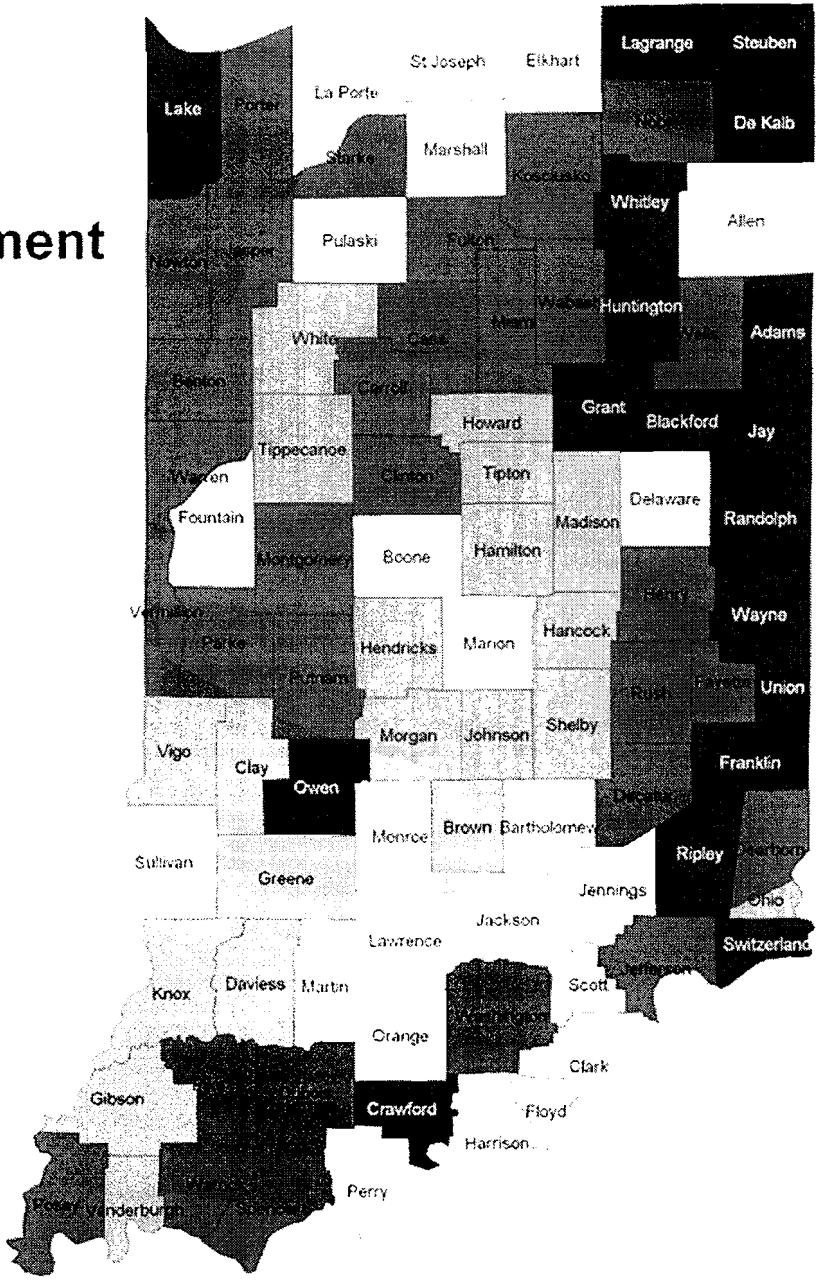
Since their basic productive potential was similar, these lands should be given the same value. Assessment by soil map removes from the valuation process differences caused by management choices and, thus, does not penalize a farmer (through his property tax) for employing poor management practices.

Soil maps also permit more ... ment because the ... in mapping ...

"The estimated yield translates into a yield factor (estimated yield / 100) and is applied to a base rate of $450, which is the prescribed true cash value of an acre of land capable of producing 100 bushels of corn."


Indiana Corn Yield, Bushels per Acre
180
160
140
120
100
80
60
40
20
0
1866
1876
1886
1896
1906
1916
1926
1936
1946
1956
1966
1976
1986
1996
2006
Annual Yield
10-Year Moving Average

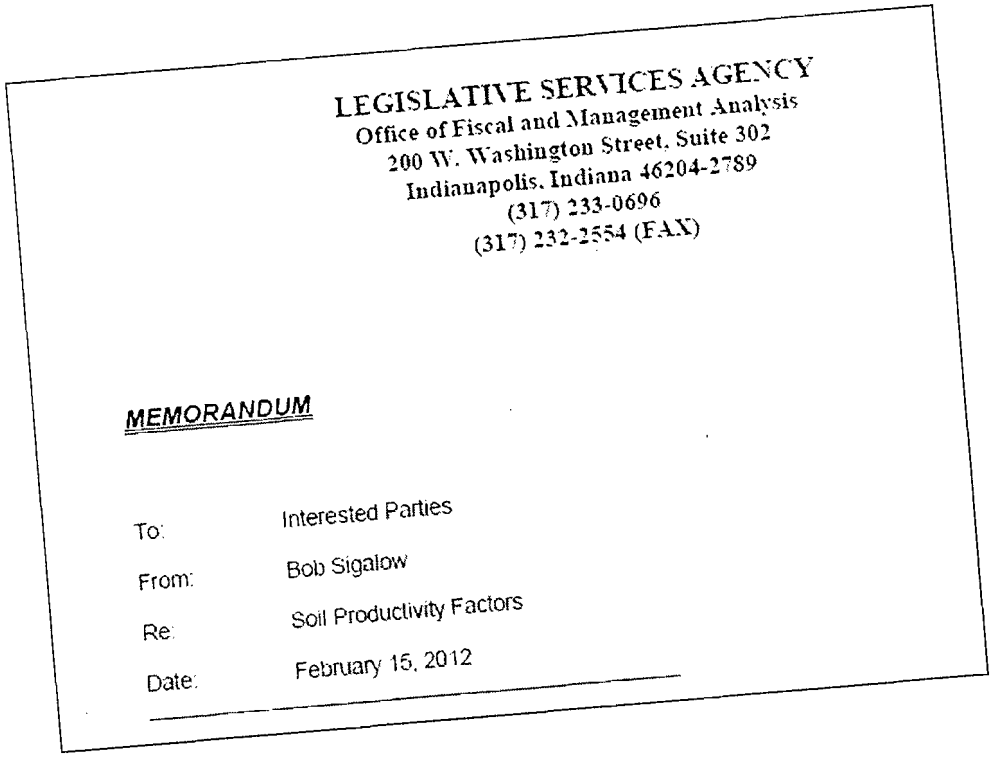
Percent Change in Weighted Average Soil Factors, 2012-13 Reassessment



Soil Factor Change

- 15.0% to 24.0%
- 24.0% to 28.0%
- 28.0% to 45.0%
- No data

Legislative Services Agency, "Soil Productivity Factors," February 15, 2012



LEGISLATIVE SERVICES AGENCY
Office of Fiscal and Management Analysis
200 W. Washington Street, Suite 302
Indianapolis, Indiana 46204-2789
(317) 233-0696
(317) 232-2554 (FAX)

MEMORANDUM

To: Interested Parties

From: Bob Sigalow

Re: Soil Productivity Factors

Date: February 15, 2012

"The new soil productivity factors were introduced into LSA's property tax model to estimate the resulting tax shift for taxes payable in 2013. For the 69 counties, farmland net taxes are estimated to increase by about $45.7 million, or 18.5% over the estimated 2013 net tax using the old soil productivity factors."

Legislative Services Agency, "Soil Productivity Factors," February 15, 2012

Estimated Change in 2013 Net Taxes for 69 Counties From Implementation of New Soil Productivity Factors		
Property Type	**Net Tax Change**	**Percent Change**
Farmland	$ 45.7 M	18.5%
Homesteads	$ -14.2 M	-1.2%
Apartments	$ -0.2 M	-0.2%
Other Residential	$ -3.8 M	-0.8%
Ag Business (except Farmland)	$ -3.9 M	-4.6%
Other Real Property	$ -6.8 M	-0.7%
Personal Property	$ -8.5 M	-1.5%
Total	**$ 8.2 M**	**0.2%**

SENATE ENROLLED ACT No. 19

SECTION 9. IC 6-1.1-4-13 IS AMENDED TO READ AS FOLLOWS [EFFECTIVE FEBRUARY 29, 2012 (RETROACTIVE)]: Sec. 13. (a)

"However, notwithstanding the availability of new soil productivity factors and the department of local government finance's notice of the appropriate soil productivity factor for each type or classification of soil shown on the United States Department of Agriculture's soil survey map for the March 1, 2012, assessment date, the soil productivity factors used for the March 1, 2011, assessment date shall be used for the March 1, 2012, assessment date. New soil productivity factors shall be used for assessment dates occurring after March 1, 2012."

Purdue Cooperative Extension Service

Soil Productivity Factors and Farmland Assessment

Larry DeBoer
Purdue University
September 26, 2012

PURDUE
UNIVERSITY

Purdue Agricultural Economics Report

April 2012

In This Issue

- Why Farm Land Assessments Will Continue to Rise
- Farm Managers' and Rural Appraisers' Assessment of Indiana's Farmland Market
- Passing the Farm's Management to the Next Generation
- Indiana Farm Management Tour June 20 and 21
- New Faculty: Dr. Elizabeth Yeager
- Visiting Faculty: Dr. Nestor Rodriguez

Why Farm Land Assessments Will Continue to Rise

Larry DeBoer, Professor

Introduction

Property taxes on farm land have been rising and will continue to rise in the future. This is because the "base rate" of farm land, which is the statewide starting point for farm land assessed values, has been rising and will keep rising. But now, for the first time in decades, the "soil productivity factors" might rise as well. This could make the increase in farm land taxes even larger.

The assessed value of farm land is the product of the base rate, the soil factor, and (for some acreage) an "influence factor." Farm land assessments in Indiana start with a base rate, which is a dollar amount per acre. This same starting point is used for all acreage in Indiana. The base rate is set by the state's Department of Local Government Finance (DLGF), the agency that oversees the operation of the property tax in Indiana. The base rate was $1,290 per acre for taxes payable in 2011. It will be $1,500 for taxes in 2012, and, the DLGF recently announced, it will be $1,630 for taxes in 2013. The rising base rate is the primary reason why farm land taxes have been increasing.

For each acre the base rate is multiplied by a soil productivity factor. The soil factor measures the productivity of the soil for growing corn, based on corn yields by soil type. For several decades the soil factors have varied from 0.5 to 1.28. That is, for 2012 taxes, the base rate times the soil factor could vary from $750 (0.5 x $1,500) to $1,920 (1.28 x $1,500). For taxes in 2013, however, the DLGF has announced new updated soil factors. The range for the new factors is 0.5 to 1.66. In 2013, then, the range of the base rate times the soil factor would be $815 (0.5 x $1,630) to $2,706 (1.66 x $1,630). The change in the soil factors would have caused an additional increase in farm land assessments for 2013 taxes. The Indiana General Assembly has required the DLGF to postpone the use to the new soil factors until 2014, however.

Some acreage is adjusted by an influence factor, which reduces the assessment for features that limit the productivity of the land. All influence factors are percentage subtractions from assessed value. For example, land that floods two to four years in every 10 receives a 30% influence factor. The assessed value of the acreage is reduced by 30%. Land that floods five or more years in 10 receives a 50% influence factor.

The farm land assessment provides the basis for setting the property tax bill. Farm land receives few deductions, so usually the full gross assessed value of the land is multiplied

Interim Study Committee on Agriculture-Meeting 9/26/2012

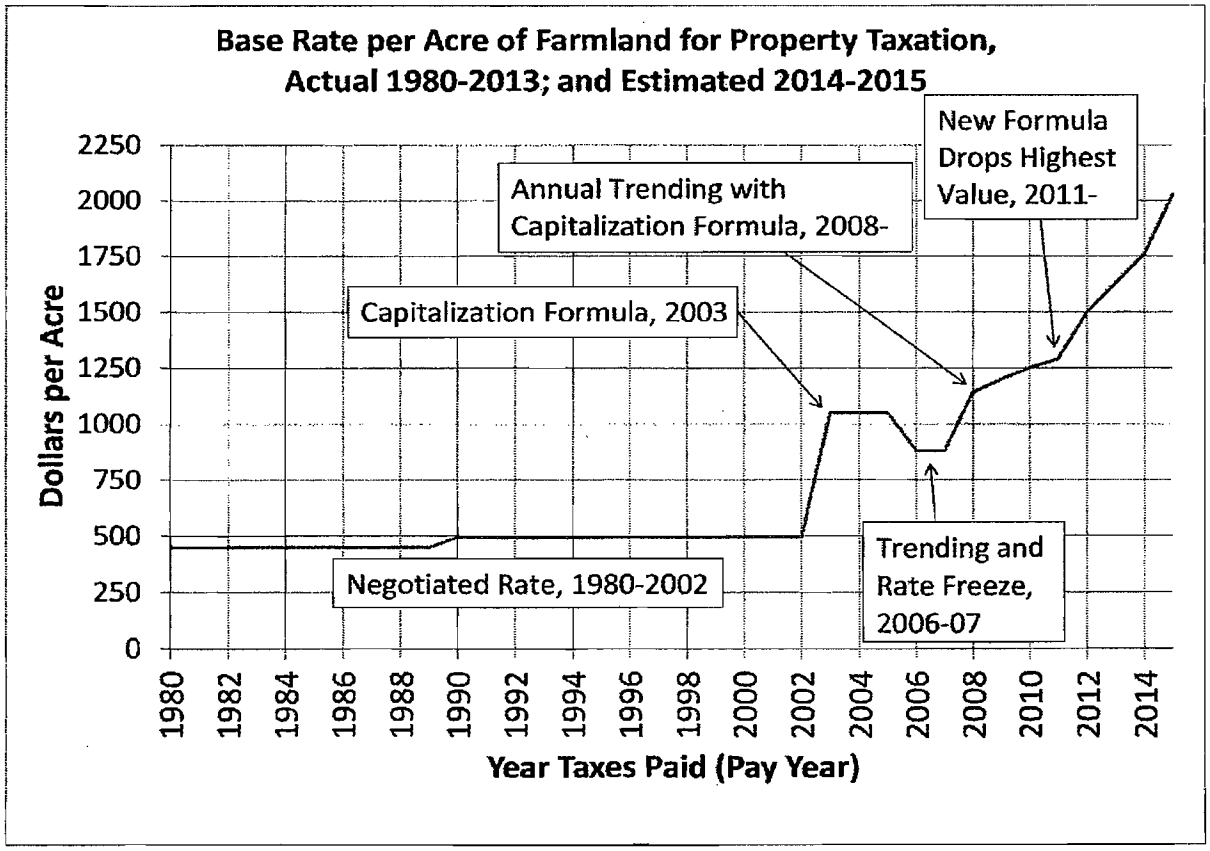
Exhibit B

by the tax rate for the taxing district in which the land is located. A taxing district is defined by the combination of local government units that serve the area. It will include the county, township, and school corporation, and possibly a city or town, library district or other special district. The tax rates of the overlapping local governments sum to the tax rate of the district. That summed rate is multiplied by the assessed value to determine the tax bill. The tax rates are expressed in dollars per $100 assessed value, so they can be read as percentage rates.
Some counties have adopted local income taxes for property tax relief. Counties have the option of delivering tax relief to homeowners only, to homeowners and rental housing owners, or to all property owners. If the county distributes the relief to all property owners, farm land owners will receive a tax credit. A credit is a percentage reduction in the tax bill. The local units lose this property tax revenue, but it is replaced dollar-for-dollar with revenue from the local income tax.

Finally, some farm land benefits from the new tax caps, also called "circuit breaker caps." Farm land tax bills are limited to 2% of the gross assessed value of the farm land. That's the assessment before deductions, (though farm land gets few deductions). If the tax bill exceeds 2% of the gross assessed value, a tax cap credit is applied to reduce the tax bill to the cap level. Farm land cannot be eligible for tax cap credits if the district tax rate is less than $2 per $100 assessed value. As it happens, most rural areas have tax rates less than $2, so very little farm land benefits from the tax caps.

The History of the Base Rate
Figure 1 shows the history of the base rate since 1980. Property is assessed in one year and taxed the next. Taxes are often identified as (for example) "2011 pay-2012," meaning the assessed value set in 2011 was the basis for tax bills in 2012. The years in Figure 1 are "pay-years," the years when the taxes were paid. From before 1980 through taxes in 2002, the base rate was negotiated by agricultural interests (such as the Farm Bureau) and officials from the State Board of Tax Commissioners, the predecessor

Figure 1



of the DLGF. Base rates were revised only in years of statewide reassessments—for taxes in 1980, 1990, and 1996. For 1980 through 1989 the base rate was set at $450 per acre. In 1990 the base rate was increased to $495 per acre, and it was left at $495 for the 1996 reassessment. It remained at that level until pay-2003.

In December 1998 the Indiana Supreme Court found the state's assessment system to be unconstitutional, because assessments were not based on objective measures of property wealth. For most property, this was interpreted to mean that assessments had to be based on market values, meaning the predicted selling prices of property. The court allowed farm land to be assessed at its use value, meaning its value for production of crops, not including its potential value for residential or business development.

The court's requirement for objective measures of property wealth still applied to the use value of farm land, so the Tax Board and then the DLGF developed the base rate capitalization formula. The formula uses objective data on prices, yields, costs, and interest rates in a capitalization formula. Income capitalization is a recognized method for measuring wealth.

The initial formula set the base rate at $1,050 per acre for taxes in 2003. The base rate had been $495, so it more than doubled, and this caused farm land property taxes to rise substantially with the 2003 reassessment. Tax bills on farm land and buildings increased an average of 15.5% statewide. Farm land tax bills increased much less than assessed values because most other assessed values increased with the reassessment. This reduced tax rates. Higher farm land assessments times lower tax rates still produced tax bill increases for farm land owners.

The court decision implied a need for annual adjustments of assessed values to keep them close to objective measures of property wealth between statewide reassessments. This is known as "trending." Farm land is trended with annual changes in the base rate. The DLGF simply inserts new data on yields, prices, costs, and interest rates into the capitalization formula to come up with an updated value. Trending started for farm land for taxes in 2006, and the base rate dropped to $880. Legislative action held the base rate at $880 for taxes in 2007 as well.

It was in pay-2008 that the big increases in the base rate began. A look at the base rate capitalization formula shows why.

The Base Rate Capitalization Formula

The base rate capitalization formula divides the rent or net income earned from a farm acre by an interest rate, to get the amount that a "rational" investor would pay for that acre. Versions of the income capitalization method are used in most states to estimate farm land assessed values. The general form of the method is:

Capitalized Value = Net Income from Agriculture / Capitalization Rate.

For example, for 2008 the DLGF estimated that a landowner could earn an average of $165 per acre in rent or as an operator growing corn or beans. The Chicago Federal Reserve reported several farm-related interest rates that averaged 6.56%. The net income divided by the interest rate is $2,508.

Imagine an auction for an acre that earns $165. Suppose the first bid is $1,000. Earnings of $165 on an investment of $1,000 give a rate of return of 16.50%. That's much higher than the 6.56% return that can be earned on investments generally. The bid rises to $2,000, a rate of return of 8.25%, which is still high. At a bid of $2,508 the rate of return is no better or worse than other

Table 1

Calculation of the Base Rate for an Acre of Farmland

Assessment Year 2011; Tax Year 2012

	NET INCOMES			MARKET VALUE IN USE		
Year	Cash Rent	Operating	Cap. Rate	Cash Rent	Operating	Average
2003	106	71	6.29%	1,685	1,129	1,407
2004	104	135	6.35%	1,638	2,126	1,882
2005	110	59	7.22%	1,524	817	1,170
2006	110	74	8.18%	1,345	905	1,125
2007	122	184	7.94%	1,537	2,317	1,927
2008	140	189	6.56%	2,134	2,881	2,508

Average Market Value in Use **$1,500**

investments. A rational investor would not bid more.

Note that this is a calculation of the "use value" of the farm land because it considers only the income that can be earned from growing and selling crops. Potential income from residential or commercial uses is excluded.

Table 1 shows the calculation of the $1,500 base rate done for pay 2012. This is a version of a table published by the DLGF. The method capitalizes cash rent net incomes and estimated operating net incomes for each of six years and then averages the two results to get an average market value in use for each year. The cash rent data originates with the Purdue Land Value Survey. The operating net incomes are estimated from corn and soybean yield and price numbers, less fixed and variable costs. The base rate calculation uses data for six years to smooth out wide fluctuations in the base rate. The highest value of the six is dropped, and the remaining five are averaged and rounded to the nearest ten. The result is the base rate, which the DLGF calls "average market value in use."

There is a four-year lag in the data used. The base rate for taxes in 2012 uses data only through 2008. The four-year lag emerged between 1998 and 2003, when the statewide reassessment was postponed after the Supreme Court's 1998 property assessment ruling. This means that the 2012 base rate is still influenced by income and capitalization rates from 2003, nine years before. The numbers for 2008 still will have an effect on the base rate in 2017.

The base rate is a six-year rolling average. Changes in annual values of the base rate occur because an earlier year is dropped and a later year is added to the calculation. Table 2 illustrates the effects of the rolling

Table 2. Data Used to Calculate Base Rate of a Farm Land Acre

Data Year	Net Incomes: Cash Rent	Net Incomes: Operating	Cap. Rate	Market Value In Use: Cash Rent	Market Value In Use: Operating	Annual Average
1999	99	36	8.77%	1,129	410	770
2000	101	60	9.56%	1,056	628	842
2001	102	61	8.00%	1,275	763	1,019
2002	105	20	7.02%	1,496	285	890
2003	106	71	6.29%	1,685	1,129	1,407
2004	104	135	6.35%	1,638	2,126	1,882
2005	110	59	7.22%	1,524	817	1,170
2006	110	74	8.18%	1,345	905	1,125
2007	122	184	7.94%	1,537	2,317	1,927
2008	140	189	6.56%	2,134	2,881	2,508
2009	139	116	6.17%	2,253	1,880	2,066
2010	141	162	5.96%	2,366	2,718	2,542
2011	162	204	5.56%	2,914	3,669	3,291

Table 3. Base Rate Calculations

Tax Year	Data Range: First	Data Range: Last	Base Rate	Percent Change
2006	1999	2002	$880	-16.2%
2007	2000	2003	$880	0%
2008	1999	2004	$1,140	29.5%
2009	2000	2005	$1,200	5.3%
2010	2001	2006	$1,250	4.2%
2011	2002	2007	$1,290	3.2%
2012	2003	2008	$1,500	16.3%
2013	2004	2009	$1,630	8.7%
2014	2005	2010	$1,760	8.0%
2015	2006	2011	$2,030	15.3%

2006: Base rate reduced from $1,050; First year of annual trending; Last year of 4-year average.

2007: Base rate set by statute, not formula; 4-year average would have been $1,040, an 18.2% increase.

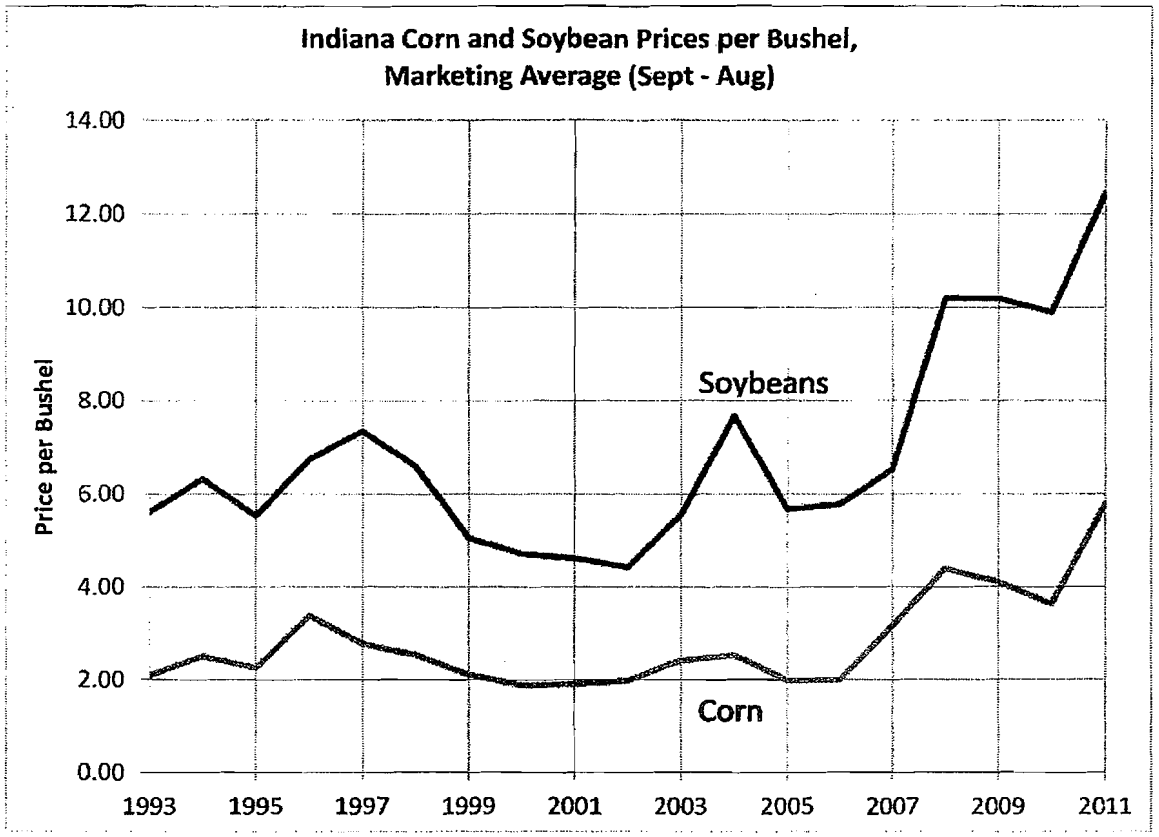
2008: First year of 6-year average; increase from $1,040 would have been 9.6%.

2009-2010: Base rates were set by DLGF based on 6-year average formula.

2011-2013: Base rates were set by DLGF based on 6-year average formula with highest year eliminated.

2014-2015: Base rate *estimates* based on existing data and 6-year average formula with highest year eliminated.

Figure 2



average. The base rate for 2012 taxes used data from the years 2003 to 2008. The base rate for 2013 taxes will use data from 2004 to 2009. The base rate will change because the results for 2003 will be dropped, and the results for 2009 will entered.

As Table 2 shows, rents and operating incomes were lower in 2003 than they were in 2009. The capitalization rate was slightly higher in the earlier year, too. So the average of the rent and operating income capitalized values for 2003 was $1,407, while it was $2,066 in 2009.

Table 3 shows the result. The smaller 2003 value was dropped from the average, and the larger 2009 value was added, so the base rate increased.

The DLGF drops the highest value of the six years from the average. The Indiana General Assembly adopted this modification of the formula for taxes in 2011, to make the increases in the base rate somewhat smaller. Prior to 2011 all six years were included in the average. The 2008 value of $2,508 happens to be the highest for both the pay-2012 and pay-2013 base rate calculations. It is dropped from the average. For 2013 taxes the earlier 2003 figure of $1,407 leaves the average, and the newer 2009 figure of $2,066 enters. The base rate will increase from $1,500 for pay-2012 to $1,630 for pay-2013.

This modification in the formula has reduced the increases in the base rate. Had the old method of including all six years in the average been used for 2011, the base rate would have been $1,400 instead of $1,290. The base rate in 2012 would have been $1,670 instead of $1,500, and the base rate for 2013 would have been $1,780 instead of $1,630. The formula modification has reduced the base rate by 7% to 10%.

The base rate increases since 2008 are partly the result of falling interest rates. The Federal Reserve has reduced the interest rates it controls in an effort to lessen the effect of the Great Recession. The base rate increases also are the result of increases in rents and operating net income. These increases result mostly from rising commodity prices. Figure 2 shows corn and soybean prices that are used in the base rate formula. Prices increased in 2003 and 2004, and again in

2007, 2008, and 2011. The 2003 prices entered the base rate formula for taxes in 2007. The 2007 prices entered the base rate formula for taxes in 2011. Table 2 shows big increases in the capitalization calculations starting in 2007, with a capitalized value of $1,927. The increase in 2011, to $3,291, was also large. Higher commodity prices are a primary reason.

The DLGF has announced the base rate for taxes in 2012 as $1,500 and the base rate for 2013 taxes as $1,630. However, because of the four-year data lag, it is possible to predict the base rate for taxes in 2014 and 2015. The 2014 base rate will include data from 2010; the 2015 base rate will include data from 2011. We know the data for 2010 and most of the data for 2011 (see Table 2). We also know the base rate formula, so base rate predictions should be accurate.

Figure 3

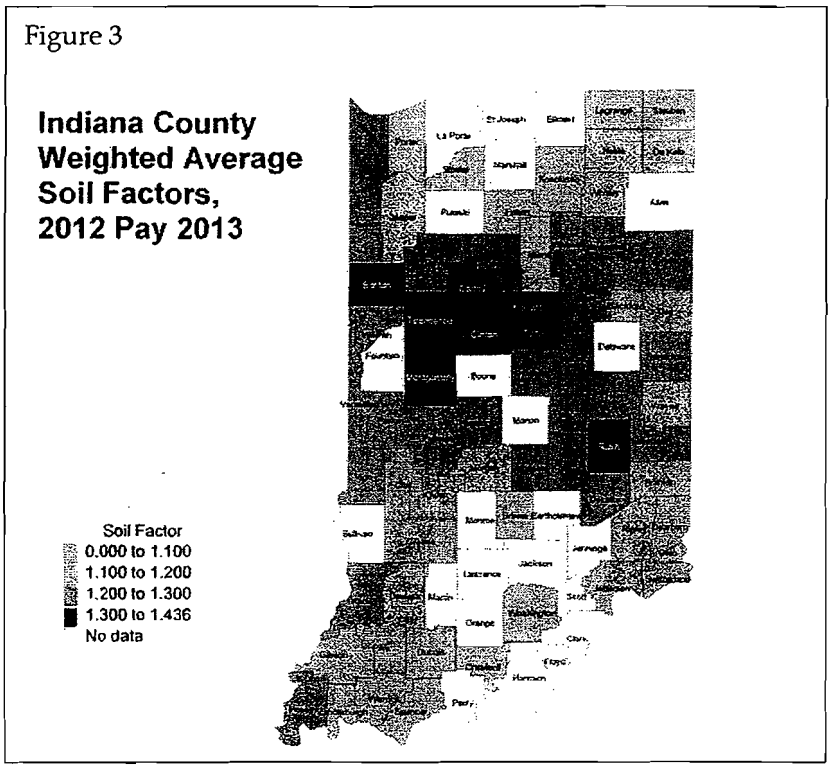


Figure 4

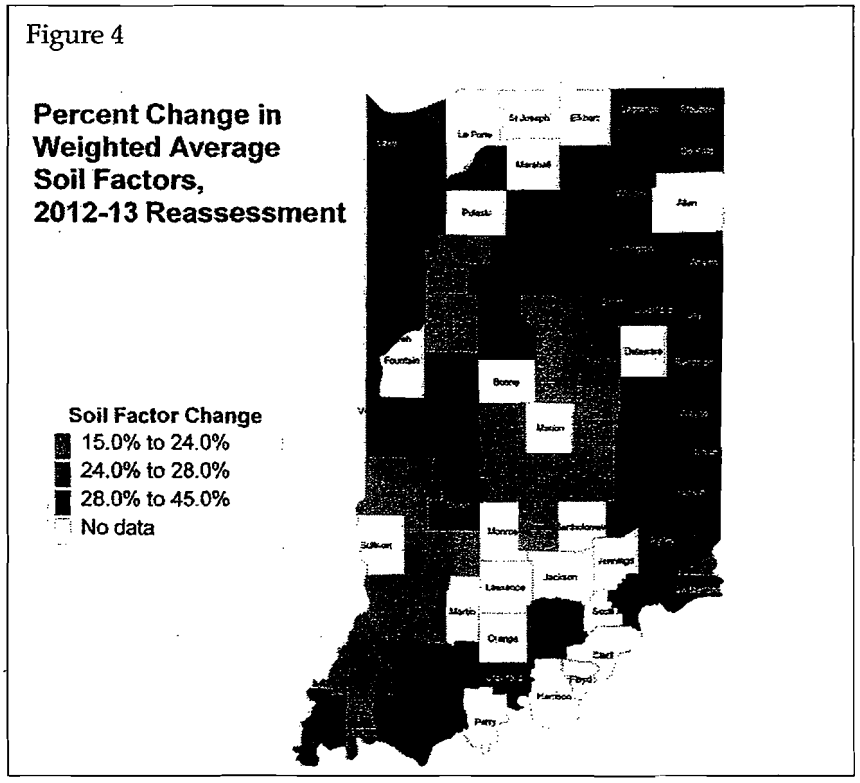


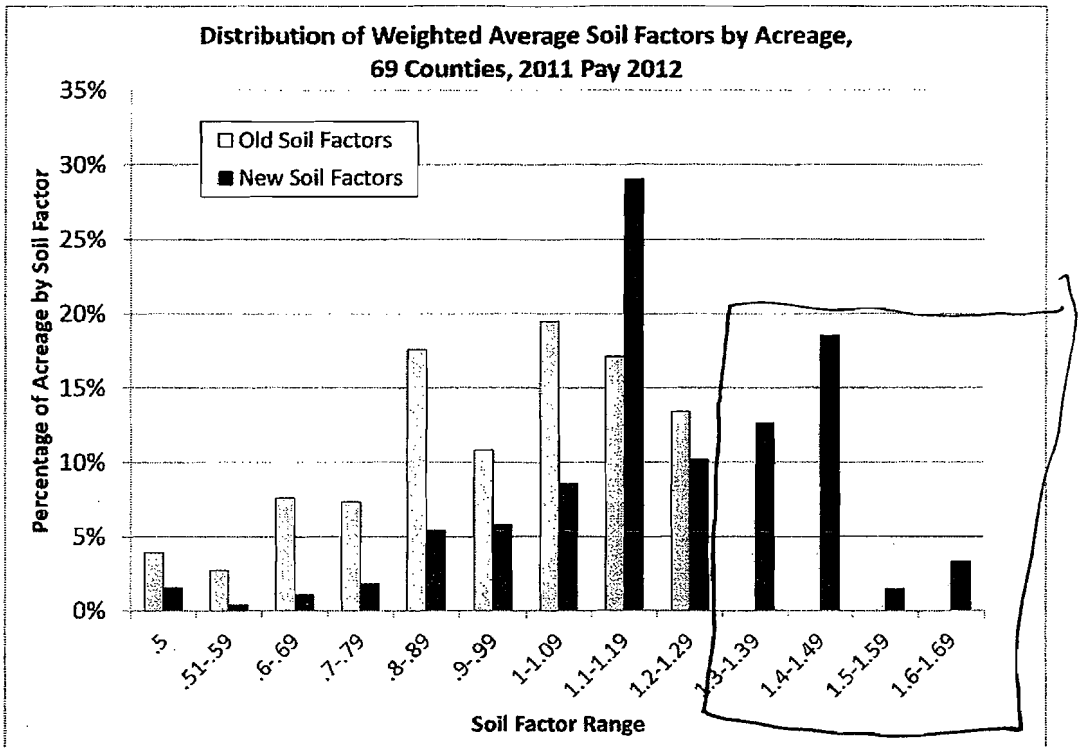
Table 3 shows the predicted base rates for 2014 and 2015. For 2014, the base rate is likely to rise by 8.0% to $1,760. For 2015, the base rate is likely to rise another 15.3% to $2,030.

The Fed has pledged to hold interest rates low at least through the end of 2014. Low interest rates from 2014 would enter the base rate formula for taxes in 2018 and remain in the formula through 2023. The high prices of 2007 will remain in the base rate formula through 2016; the high prices of 2011 will still be affecting the base rate in 2020. Farm land owners should expect the base rate to remain high through the end of this decade, at least.

Soil Productivity Factors

The base rate provides the statewide average assessment per acre. But some acreage is more valuable, some is less valuable. According to the 2011 Purdue Farmland Value Survey, in June 2011 the highest valued

Figure 5



land in Indiana was in the West Central region, with a top land value of $7,443 per acre. The lowest valued land in Indiana was in the Southeast region, with a poor land value of $2,895 per acre.

For farm land assessments to reflect property wealth, as the Supreme Court requires, farm land assessments must vary with land values across the state. The soil productivity factors provide this variation. Each acre of farm land in Indiana has been assigned a soil type, and the soil types have been assigned productivity factors. According to the DLGF's 2011 assessment guidelines, these factors are based on properties of the soil, such as slope, moisture holding capacity, organic matter content, and several other properties that affect corn yields. The factor is multiplied by the base rate as part of the calculation of assessed value.

Indiana is undertaking a statewide reassessment, which will be completed for taxes in 2013 (pay-2013). As part of this effort, the DLGF requested new soil productivity factors from the U.S. Department of Agriculture's Natural Resources Conservation Service. In a February 2, 2012 memo, the DLGF announced its intention to introduce these revised soil factors for pay-2013. The old factors ranged from 0.5 to 1.28. The new factors range from 0.5 to 1.66.

Data provided by the Indiana Legislative Services Agency allowed the calculation of weighted average soil factors for 69 counties. Each acre has a soil factor based on its soil type. County averages are calculated by summing the factors and dividing by the number of acres. The result is a "weighted" average because it accounts for the number of acres with each soil factor. Soil factors that apply to a large amount of acreage count more in the average. The weighted average old soil factor is 0.958, while the weighted average new soil factor is 1.203. The average soil factor increases by 25.5%.

The map in Figure 3 shows the soil type averages in four categories for the 69 counties with available data. The soil factors do appear to reflect corn yields in Indiana. Yields and soil factors are highest in the West Central region and lowest in the Southeast region.

Figure 4 shows a map of the percentage changes in the county-weighted average soil factors. The county average soil factor increases vary from 17.1% in Morgan to 40.5% in Jay. The

12-14
8.7
5.3
18.5
32.5%

biggest increases are mostly in the counties in the eastern third of the state.

Figure 5 shows the distribution of old and new soil factors based on acreage in 2011 pay 2012. Under the old soil factors, half of all acreage had factors under 1.0, and half had factors of 1.0 or more. Under the new soil factors, only 17% of acreage have a factor less than 1.0, 48% have factors between 1.0 and 1.3, and 36% have factors of 1.3 or more.

This increase in the soil factors is problematic. Certainly yields continue to increase, and the soil factors may reflect these increases. But the base rate already includes the average yield statewide, implicitly in the rents, explicitly in the calculation of operating income. As yields rise year after year, so does the base rate. If the soil factors also increase, the rise in yields is double-counted in assessed values. The soil factors would have to average near one to avoid this double-counting.

The DLGF's assessment guidelines state that "The productivity factor for a soil map unit is calculated by dividing the estimated 10-year average corn yield (calculated in bushels per acre) by 100." The old soil factors originated about 30 years ago, at a time when the average corn yield per acre was approximately 100 bushels per acre. This may explain why the old factors varied around one (see Figure 5). Average bushels per acre are now well over 100 bushels per acre, which may explain why the new factors vary around 1.2.

But input costs are not factored?

In March the Indiana General Assembly passed Senate bill 19, section 9 of which requires the DLGF to postpone the use of the new soil factors from pay-2013 to pay-2014. The old soil factors must be used for taxes in 2013. It is expected that the effects of the new soil factors will be reviewed by one of the legislature's summer study committees.

Property Tax Bills

The Indiana Legislative Services Agency (LSA) provides estimates of the effect of assessment changes on tax bills by property type. The base rate is rising from $1,290 to $1,500 for taxes in 2012, a 16.3% increase. LSA estimates that agricultural business tax bills—including farm buildings and land—will rise by 11.4%. The base rate will increase another 8.7% to $1,630 for taxes in 2013. LSA estimates that the agricultural business tax bills will rise another 5.3% in 2013.

In each year the increase in tax bills is less than the increase in the base rate. This is partly because the assessments of farm buildings will increase less than the assessment of farm land. In most cases tax bills rise by less than the base rate increase because other property also will see increases in assessed values. Farm land assessments rise more, so agricultural tax bills will rise more than bills on other property types.

LSA's estimates were made before the DLGF announced the new soil productivity factors. The new factors represent a substantial increase over the old factors, 25.5% on average. LSA has estimated that the introduction of the new soil factors in pay-2013 would increase farm land property taxes by 18.5%, in addition to the increase from the rise in the base rate.

The new soil factors would *decrease* the tax bills of all other property types. Higher valued farm land means agriculture would pay a larger share of the statewide property tax bill. Other taxpayers would pay a smaller share. Farm land makes up a small share of statewide assessed value, so the decreases in other taxpayers' bills would be small. LSA estimates that average homeowner tax bills would fall 1.2% and average business real property tax bills would fall 0.7%. In addition, average property taxes on farm buildings would fall 4.6%.

The overall increase in agricultural tax bills from the rising base rate and revised soil factors would be substantial. Implementation of the new soil factors has been postponed by the General Assembly. The factors will be studied and possibly modified before they become effective. But the base rate increases will occur unless there is a change in the capitalization formula. The General Assembly made such a change for pay-2011, but there was no further modification considered in the recently concluded 2012 session. Farm land owners should plan for higher property taxes, probably for the rest of the decade.

A World Of Information

National Crop Insurance Services®

Agriculture Is Vital to Indiana's Economy

- Indiana was ranked 15th nationally for total farm sales in 2009. Indiana's agricultural industry contributes $10.5 billion to the state's economy.

- Indiana is best known for its corn, soybean and hog production, although Indiana produces more ducks than any other state in the nation. The state is also the second largest popcorn producer in the country. Other important crops include tomatoes, peppermint, spearmint, layer chickens, eggs, and both regular and fat free ice cream.

- There are approximately 61,000 farms in Indiana, located on nearly 14.7 million acres. The average farm size in Indiana is 242 acres.

Crop Insurance Is Vital to Indiana's Agricultural Sector

- Crop insurance protected $5.8 billion of liability on growing crops in Indiana in 2011. There were 8.6 million acres insured and more than $201 million was paid to farmers in indemnities for production and/or revenue losses.

- The top commodities (liability) for crop insurance protection in 2011 were:

    - Corn - $3.5 billion, protecting 4.4 million acres.
    - Soybeans - $2.1 billion, protecting 3.8 million acres.
    - Wheat - $74 million, protecting 229,598 acres.

- The private crop-hail insurance product provided an additional $2.1 billion in liability protection on growing crops in Indiana.

National Crop Insurance Services
www.CropInsuranceInAmerica.com
913-685-2767

2011 Indiana Crop Insurance Profile

Insurance Plans Available in Indiana

Insurable Crops	Insured Acres	Total Acres	Percent Insured
Apples	685	1,800	38%
Barley	66	N/A	N/A
Burley Tobacco	1972	N/A	N/A
Corn	4,376,424	5,900,000	74%
Grain Sorghum	3,596	N/A	N/A
Hybrid Seed Corn	56,188	N/A	N/A
Mint	3,558	10,500	34%
Oats	107	15,000	0%
Popcorn	42,748	65,000	69%
Potatoes	1,078	N/A	N/A
Processing Beans	556	5,600	10%
Soybeans	3,834,880	5,300,000	72%
Tomatoes	5,261	9,600	55%
Wheat	229,240	430,000	53%
Total	**8,556,449**	**11,737,500**	**73%**

N/A = Not Available

Dollar Liability Program	Total Dollar Liability
Group Risk Income Protection (GRIP) Harvest Rev Opt	$956,953,167
Group Risk Income Protection (GRIP)	$154,149,234
Livestock Gross Margin (LGM)	$6,790,820
Livestock Risk Protection (LRP)	$634,175
Nursery	$2,509,183

Crop Pilot Programs

Program	County Availability

Springfield Regional Office
Contact: Brian D. Frieden, Director
Address: 3500 Wabash Ave.
Springfield, IL 62711
Phone: (217) 241-6600
Fax: (217) 241-6618
E-mail: brian .frieden@rma.usda.gov

Midwest Regional Compliance Office
Contact: Ronie Griffin, Director
Address: Corporate Center North
6905 Corporate Circle
Indianapolis, IN 46278
Phone: (317) 290-3050
Fax: (317) 290-3065
E-Mail: ronie.griffin@rma.usda.gov

Data current as of January 2012

RMA

Risk Management Agency/USDA

Indiana
Fifteen Year Crop Insurance History

Year	Policies Earning Premium	Net Acres Insured	Liability	Gross Premium	Losses	Loss Ratio
1997	39,016	5,131,817	852,726,498	42,175,012	30,058,348	0.71
1998	38,668	5,360,592	1,007,148,852	50,627,602	43,363,608	0.86
1999	40,544	5,955,291	1,083,187,367	66,589,881	55,776,624	0.84
2000	44,481	6,871,474	1,419,015,326	94,403,880	35,002,918	0.37
2001	42,953	6,911,256	1,445,439,923	99,889,026	17,462,172	0.17
2002	41,227	6,955,983	1,445,342,020	96,462,476	134,363,767	1.39
2003	41,823	7,142,208	1,655,942,320	117,458,905	104,436,956	0.89
2004	41,438	7,283,722	2,030,703,078	162,099,883	93,804,911	0.58
2005	42,004	7,704,634	2,002,812,466	163,314,451	38,942,535	0.24
2006	40,682	7,785,011	2,321,033,899	194,348,438	35,160,245	0.18
2007	39,856	7,797,901	3,499,131,915	300,939,269	110,121,701	0.37
2008	40,396	7,824,614	4,617,147,027	449,367,282	524,765,981	1.17
2009	42,181	8,242,395	3,749,589,077	384,123,675	96,676,899	0.25
2010	40,993	8,272,772	3,764,537,314	305,454,447	82,026,600	0.27
2011	42,921	8,556,637	5,762,524,848	512,812,721	133,759,373	0.26

* 2011 numbers are incomplete

NOTE: To see detailed information on the above 15 Year Crop Insurance History by County, go to RMA's Summary of Business Application at: http://www3.rma.usda.gov/apps/sob/ and then click on the "Run Application" button. Select the State/County tab and then select the appropriate Year and State to get a listing by County. Select the desired output type –Formatted Print, or Download Data to Excel.

Federal Crop Insurance Corporation
Crop Year Statistics for 2012
As of: September 10, 2012
Nationwide Summary - By State/Crop

Crop	Ins Plan	Delivery	Pol Sold	Pol Earn Prem	Pol Indem	Units Earn Prem	Units Indem	Net Acres	Liabilities	Total Premium	Subsidy	Cost Share	State Sbsdy	Prem Dscnt	Indemnity	Loss Ratio
INDIANA																
APPLES	APH	RBUP	14	14	1	18	1	550	2,035,128	310,612	193,055	0	0	0	81,238	.26
		RCAT	2	2	0	2	0	123	141,783	11,741	11,741	0	0	0	0	.00
	APH Total		16	16	1	20	1	673	2,176,911	322,353	204,796	0	0	0	81,238	.25
APPLES Total			16	16	1	20	1	673	2,176,911	322,353	204,796	0	0	0	81,238	.25
BARLEY	RP	RBUP	1	1	0	1	0	14	3,756	695	382	0	0	0	0	.00
	YP	RBUP	5	1	0	2	0	74	17,401	2,192	1,293	0	0	0	0	.00
BARLEY Total			6	2	0	3	0	88	21,157	2,887	1,675	0	0	0	0	.00
BURLEY TOBACCO	APH	RBUP	174	93	3	201	3	1,825	4,647,145	643,117	359,361	0	0	0	49,161	.08
		RCAT	2	1	0	1	0	14	18,547	493	493	0	0	0	0	.00
	APH Total		176	94	3	202	3	1,839	4,665,692	643,610	359,854	0	0	0	49,161	.08
BURLEY TOBACCO Total			176	94	3	202	3	1,839	4,665,692	643,610	359,854	0	0	0	49,161	.08
CORN	GRIP	RBUP	239	197	0	331	0	51,742	62,231,522	3,538,383	1,564,528	0	0	0	0	.00
	GRIPH	RBUP	1,698	1377	0	2,685	0	415,905	508,304,163	37,656,021	16,623,307	0	0	0	0	.00
	GRP	RBUP	449	361	0	586	0	72,348	93,112,249	2,645,271	1,359,570	0	0	0	0	.00
		RCAT	15	15	0	18	0	5,194	3,214,398	28,141	28,141	0	0	0	0	.00
	GRP Total		464	376	0	604	0	77,542	96,326,647	2,673,412	1,387,711	0	0	0	0	.00
	RP	RBUP	18,590	15466	649	57,053	1,088	3,501,572	2,584,007,917	198,221,923	115,316,483	0	0	0	2,457,192	.01
	RPHPE	RBUP	1,082	923	31	2,951	43	208,026	161,598,283	6,442,066	3,714,026	0	0	0	68,757	.01
	YP	RBUP	1,934	1526	24	3,220	29	151,825	96,577,213	4,700,562	2,680,262	0	0	0	128,912	.03
		RCAT	487	357	0	1,139	0	103,676	25,111,249	550,360	550,360	0	0	0	0	.00
	YP Total		2,421	1,883	24	4,359	29	255,501	121,688,462	5,250,922	3,230,622	0	0	0	128,912	.02
CORN Total			24,494	20,222	704	67,983	1,160	4,510,288	3,534,156,994	253,782,727	141,836,677	0	0	0	2,654,861	.01
FORAGE SEEDING	DOL	RBUP	4	0	0	0	0	0	0	0	0	0	0	0	0	.00
GRAIN SORGHUM	RP	RBUP	330	44	2	102	6	3,287	1,103,606	136,996	86,160	0	0	0	15,136	.11
	RPHPE	RBUP	1	0	0	0	0	0	0	0	0	0	0	0	0	.00
	YP	RBUP	97	5	0	9	0	138	31,083	3,005	1,842	0	0	0	0	.00
		RCAT	28	5	0	10	0	278	31,457	2,880	2,880	0	0	0	0	.00
	YP Total		125	10	0	19	0	416	62,540	5,885	4,722	0	0	0	0	.00
GRAIN SORGHUM Total			456	54	2	121	6	3,703	1,166,146	142,881	90,882	0	0	0	15,136	.11
HYBRID CORN SEED	YDO	RBUP	503	311	7	777	10	54,267	53,791,964	4,549,700	2,623,471	0	0	0	306,970	.07
		RCAT	72	59	0	93	0	17,170	6,389,163	307,188	307,188	0	0	0	0	.00
	YDO Total		575	370	7	870	10	71,437	60,181,127	4,856,888	2,930,659	0	0	0	306,970	.06
HYBRID CORN SEED Total			575	370	7	870	10	71,437	60,181,127	4,856,888	2,930,659	0	0	0	306,970	.06
MINT	APH	RBUP	26	22	0	103	0	3,683	3,496,539	266,467	146,558	0	0	0	0	.00
NURSERY (FG&C)	DOL	RBUP	1	0	0	0	0	0	0	0	0	0	0	0	0	.00
		RCAT	2	2	0	2	0	0	1,301,227	5,509	5,509	0	0	0	0	.00
	DOL Total		3	2	0	2	0	0	1,301,227	5,509	5,509	0	0	0	0	.00
NURSERY (FG&C) Total			3	2	0	2	0	0	1,301,227	5,509	5,509	0	0	0	0	.00
OATS	APH	RBUP	5	2	0	2	0	172	39,223	3,145	1,856	0	0	0	0	.00
PEACHES	APH	RBUP	4	4	0	4	0	72	225,401	60,835	36,960	0	0	0	0	.00
POPCORN	RP	RBUP	101	80	2	272	2	22,822	16,014,696	1,549,727	736,463	0	0	0	3,238	.00

Federal Crop Insurance Corporation
Crop Year Statistics for 2012
As of: September 10, 2012
Nationwide Summary - By State/Crop

Crop	Ins Plan	Delivery	Pol Sold	Pol Earn Prem	Pol Indem	Units Earn Prem	Units Indem	Net Acres	Liabilities	Total Premium	Subsidy	Cost Share	State Sbsdy	Prem Dscnt	Indemnity	Loss Ratio
INDIANA																
POPCORN	RPHPE	RBUP	15	14	0	33	0	4,027	3,168,259	230,118	96,234	0	0	0	0	.00
	YP	RBUP	301	133	6	324	12	24,682	17,646,894	1,128,307	527,461	0	0	0	20,635	.02
		RCAT	22	12	0	34	0	6,280	1,662,709	43,894	43,894	0	0	0	0	.00
	YP Total		323	145	6	358	12	30,962	19,309,603	1,172,201	571,355	0	0	0	20,635	.02
POPCORN Total			439	239	8	663	14	57,811	38,492,558	2,952,046	1,404,052	0	0	0	23,873	.01
POTATOES	APH	RBUP	4	4	1	17	1	807	1,028,971	149,388	94,440	0	0	0	33,588	.22
		RCAT	1	1	0	1	0	246	250,105	22,768	22,768	0	0	0	0	.00
	APH Total		5	5	1	18	1	1,053	1,279,076	172,156	117,208	0	0	0	33,588	.20
POTATOES Total			5	5	1	18	1	1,053	1,279,076	172,156	117,208	0	0	0	33,588	.20
PROCESSING BEANS	APH	RBUP	27	13	0	19	0	788	584,871	72,270	39,749	0	0	0	0	.00
		RCAT	2	1	0	1	0	77	14,300	3,630	3,630	0	0	0	0	.00
	APH Total		29	14	0	20	0	865	599,171	75,900	43,379	0	0	0	0	.00
PROCESSING BEANS Total			29	14	0	20	0	865	599,171	75,900	43,379	0	0	0	0	.00
SOYBEANS	GRIP	RBUP	161	135	0	238	0	29,286	25,029,219	1,961,922	874,250	0	0	0	0	.00
	GRIPH	RBUP	1,475	1178	0	2,155	0	278,582	237,010,684	23,329,828	10,308,110	0	0	0	0	.00
	GRP	RBUP	650	529	0	876	0	102,213	83,558,289	2,289,404	1,174,723	0	0	0	0	.00
		RCAT	20	18	0	33	0	7,437	2,835,938	19,165	19,165	0	0	0	0	.00
	GRP Total		670	547	0	909	0	109,650	86,394,227	2,308,569	1,193,888	0	0	0	0	.00
	RP	RBUP	18,275	14800	1,354	52,875	2,316	2,955,236	1,446,445,504	121,107,567	70,963,464	0	0	0	3,431,265	.03
	RPHPE	RBUP	943	730	61	2,254	90	124,475	61,735,927	3,310,971	1,910,705	0	0	0	160,586	.05
	YP	RBUP	1,955	1535	62	3,267	91	138,881	57,027,278	2,989,043	1,697,275	0	0	0	98,159	.03
		RCAT	515	369	0	1,166	0	89,342	14,179,738	302,902	302,902	0	0	0	0	.00
	YP Total		2,470	1,904	62	4,433	91	228,223	71,207,016	3,291,945	2,000,177	0	0	0	98,159	.03
SOYBEANS Total			23,994	19,294	1,477	62,864	2,497	3,725,452	1,927,822,577	155,310,802	87,250,594	0	0	0	3,690,010	.02
TOMATOES	APH	RBUP	49	32	0	83	0	4,547	7,996,076	774,021	467,052	0	0	0	0	.00
		RCAT	12	7	0	24	0	825	601,783	55,176	55,176	0	0	0	0	.00
	APH Total		61	39	0	107	0	5,372	8,597,859	829,197	522,228	0	0	0	0	.00
TOMATOES Total			61	39	0	107	0	5,372	8,597,859	829,197	522,228	0	0	0	0	.00
WHEAT	GRIP	RBUP	17	12	0	19	0	769	619,235	60,035	27,623	0	0	0	0	.00
	GRIPH	RBUP	42	27	0	62	0	4,206	3,463,783	449,018	198,171	0	0	0	0	.00
	GRP	RBUP	20	12	0	15	0	407	219,131	6,577	3,375	0	0	0	0	.00
	RP	RBUP	3,957	1825	275	3,369	455	137,008	52,906,251	6,674,368	3,975,890	0	0	0	2,817,451	.42
	RPHPE	RBUP	114	68	4	125	12	5,191	2,144,903	252,078	143,633	0	0	0	21,048	.08
	YP	RBUP	1,348	536	60	787	80	21,813	7,055,670	449,794	267,855	0	0	0	224,278	.50
		RCAT	242	99	6	183	7	12,633	1,769,506	74,094	74,094	0	0	0	6,459	.09
	YP Total		1,590	635	66	970	87	34,446	8,825,176	523,888	341,949	0	0	0	230,737	.44
WHEAT Total			5,740	2,579	345	4,560	554	182,027	68,178,479	7,965,964	4,690,641	0	0	0	3,069,236	.39
INDIANA Total			56,033	42,958	2,548	137,542	4,246	8,564,535	5,652,400,137	427,393,367	239,643,528	0	0	0	9,924,073	.02
Grand Total			56,033	42,958	2,548	137,542	4,246	8,564,535	5,652,400,137	427,393,367	239,643,528	0	0	0	9,924,073	.02

COMBO POLICY INFORMATION FOR AGENTS

Beginning with the 2011 crop year, Risk Management Agency (RMA) introduced a Common Crop Insurance Policy, known as the COMBO plan. The new guidelines combine previous yield and revenue plans into one standardized plan.

Yield Protection or Revenue Protection is available for the following crops:

- Coarse Grains (corn, grain sorghum, soybeans)
- Small Grains (barley* and wheat*)
- Cotton
- Rice
- Canola*/Rapeseed
- Sunflowers

both fall and spring planted crops

Plan 90 (APH) currently remains available for the following crops:

- Cabbage
- Dry Beans
- Forage Production
- Mint, Millet, Mustard
- Onions
- Peas
- Peanuts
- Popcorn
- Potatoes
- Perennial Fruits & Nuts
- Small Grains, not traded: Buckwheat, Flax, Oats, Rye
- Sugar Cane
- Sugar Beets
- Sweet Corn
- Tomatoes
- TX Citrus

Yield Dollar Plan (55) also remains in effect for seed corn. Established and additional price elections will continue for remaining APH plans.

PLAN 01: YIELD PROTECTION (YP)

Protection: Production loss due to naturally occurring events ONLY.

Price: Market-based value is determined per the Commodity Exchange Price Provision (CEPP). RMA reserves the right to set/modify price for YP. Insured may choose 55% to 100% of the projected price.

Guarantee: Determined by multiplying the production guaranteed (Yield x Coverage Level Percent) by the Projected Price.

Availability: Crops traded on commodity exchanges

Note: Good Experience Discount will continue for YP only. Contact us for more details.

PLAN 02: REVENUE PROTECTION (RP)

Protection: Provides protection against:

- Loss of revenue due to a production loss
- Loss of revenue due to a price decline or price increase
- Loss of revenue due to a combination of both

Price: Determined per CEPP, but NO price election. Must take 100%.

Guarantee: Determined by multiplying the production guaranteed per acre by the "greater of" Projected Price or Harvest Price.

CAT: The Catastrophic Coverage Endorsement is NOT available.

PLAN 03: REVENUE PROTECTION WITH HARVEST PRICE EXCLUSION (RPE)

Protection: Same as RP with the amount of insurance based on the Projected Price ONLY.

Guarantee: Harvested production (plus any appraised production) is multiplied by Harvest Price and compared to the revenue guaranteed (Yield x Projected Price).

Note: RPE is now considered a Plan – not an Option. Instead of adding the Harvest Price Option, it is excluded.

COMBO UNIT STRUCTURE

Four Types: Basic (BU), Optional (OU), Enterprise (EU), Whole-Farm (WU).

Offered with Restrictions:
Enterprise Units are available for RP and RPE. Enterprise Units are available for YP if RP is available. If RP is not available then Enterprise Units are NOT available unless allowed by Special Provisions of Insurance (SPOI's). Whole-Farm units are available for RP and RPE only.

Elections for "dual" counties:
Elections must be made by the fall sales closing date. If no fall acreage planted, may change elections at spring sales closing date. Winter Wheat and Spring Wheat acres will be combined into one Enterprise Unit for all wheat acres.

Revenue Price Discovery (RP)

Commodity Exchange Price Provision (CEPP): Will be posted on the RMA Web site www.rma.usda.gov by the Contract Change Date (CCD) for each crop.

Volatility Factor: Included to reflect the likelihood of change in value during the insurance period.

Price Movement Limits: Maximum of 200% increase from Projected to Harvest, no downward limit.

If Projected Price cannot be set, reverts to YP and RMA to set the price. Automatically reverts to RP/RPE for the next crop year. Insured may cancel by cancellation date with no premium due. If insufficient market data prevents a Harvest Price, it will revert to Projected Price.

Price Discovery – Sample Chart

Commodity	Exchange	Futures	Projected	Harvest
Corn	CBOT	DEC	FEB	OCT
Cotton	ICE-US	DEC	FEB	OCT
Grain Sorghum	CBOT (corn)	DEC	FEB	OCT
Rice	CBOT	NOV	Jan 15 - Feb 14	OCT
Soybeans	CBOT	NOV	FEB	OCT
Sunflowers	CBOT (soy oil)	DEC	FEB	OCT

The price for each crop is determined in accordance with the Commodity Exchange Price Provisions (CEPP). The Projected Price is used regardless of election to obtain RP or YP.

RMA Conversion Plan

Previous Plan	New Plan	
APH (90)	Yield Protection - YP RY11 (01)	ONE projected price
CRC (44), RA w/ HPO	Revenue Protection - RP (02)	Harvest prices apply
RA w/o (25)	Revenue Protection with Harvest Price Exclusion - RPE (03)	Based on projected price (excludes harvest price) Yield x projected price = guarantee
IP (42) IIP (45)	Revenue Protection with Harvest Price Exclusion - RPE (03)	Based on projected price (excludes harvest price) Yield x projected price = guarantee
	RY12	
GRP (12)	Area YP (04)	
GRIP with HRO (73)	Area RP (05)	
Grip w/o (73)	Area HRP (06)	

Plan 90 vs. Yield Protection (YP)

APH (90)

- Remains in force for non-traded commodities only
- 11-Basic Provisions
- Utilizes an RMA Established or Additional Price
- Election of 55%-100% of price
- Guarantee in Bushels

YP (01)

- Only available for 10 commodities traded on an exchange
- 11-Basic Provisions
- Uses market-based price
- Election of 55%-100% of price
- Guarantee in dollars, but does NOT pay for decline/increase in price.

Yield & Revenue Policies Combined

One policy now provides Yield Protection, Revenue Protection, and Revenue Protection with the Harvest Price Exclusion.

CRC (Crop Revenue Coverage), RA (Revenue Assurance), IP (Income Protection), and IIP (Indexed Income Protection) are replaced by the following two new plans of insurance:

- Revenue Protection
- Revenue Protection with the Harvest Price Exclusion

Benefits

Insured: Consistent Basic Policy and Crop Policy provisions. Less confusion on Harvest Price Option.

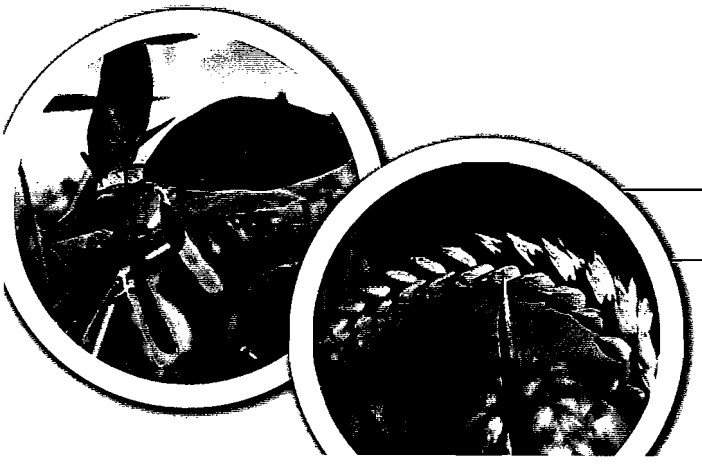
Agent: One set of provisions.

Companies: Cost efficiency.

2011 Policy Changes

- Actuarial
- Commodity Price Provisions (CEPP) ... (for Yield & Revenue)
- Prevented Planting
- Good Farming Practice Appeal
- Access to Records
- Assignment of Indemnity
- Acreage Reporting
- Written Agreements

Contact your sales representative for further information.



Crop Risk Services • 2525 Federal Drive • Decatur, IL 62526

The products and services described here are reinsured to Agrinational Insurance Corporation. The insurance products described here are subject to availability and qualifications. Other terms, conditions, and exclusions may apply. American Alternative Insurance Corporation is not licensed in all states. These products are reinsured by the FCIC. Not all products are available in all states. This does not constitute an offer of any product in any jurisdiction. This entity is an equal opportunity employer.

i945-3 1111

Crop Insurance Plan Comparison

	YP	RP	RP HPE	GRP	GRIP	GRIP HRO	APH
Plan Code	01	02	03	04	06	05	90
Coverage	individual yield	individual revenue	individual revenue	area yield	area revenue	area revenue	individual yield
Insures Against	production loss	revenue loss due to increase or decrease in price, low yield, or combination of these	revenue loss due to decrease in price, low yield, or combination of these	county-wide production loss	county-wide revenue loss	county-wide revenue loss	production loss
Administrative Fee	$30 $300 CAT	$30 no CAT available	$30 no CAT available	$30 $300 CAT	$30 no CAT available	$30 no CAT available	$30 $300 CAT
Available Unit Structure	basic, optional, enterprise, [1] whole-farm	basic, optional, enterprise, [1] whole-farm	basic, optional, enterprise, whole-farm	one unit per county	one unit per county	one unit per county	basic, optional, [1] enterprise, [1] whole-farm
Applicable Price(s)/Price Election(s)	percentage elected by insured of projected price defined by CEPP	projected price and harvest price defined by CEPP	projected price and harvest price defined by CEPP	45% (CAT), or 60%-100% of maximum dollar amount of protection based on expected price	60%-100% of maximum dollar amount of protection based on expected price	60%-100% of maximum dollar amount of protection based on higher of expected and harvest price	percentage elected by insured of price election determined by the Risk Management Agency
Maximum Price Movement	not applicable	harvest price not to exceed projected price x 2.00-(except for corn silage and rapeseed for which the harvest price = projected price)	harvest price not to exceed projected price x 2.00 (except for corn silage and rapeseed for which the harvest price = projected price)	not applicable	downward: no limit upward: harvest price limited to 200% of expected price (per Special Provisions)	downward: no limit upward: harvest price limited to 200% of expected price (per Special Provisions)	not applicable
Coverage Level Percent Available	50%, 55%, 60%, 65%, 70%, 75%, [1]80%, [1]85%	50%, 55%, 60%, 65%, 70%, 75%, [1]80%, [1]85%	50%, 55%, 60%, 65%, 70%, 75%, [1]80%, [1]85%	65% (CAT), 70%, 75%, 80%, 85%, 90%	70%, 75%, 80%, 85%, 90%	70%, 75%, 80%, 85%, 90%	50%, 55%, 60%, 65%, 70%, 75%, [1]80%, [1]85%
APH	required	required	required	not required	not required	not required	required
Acreage Report	required	required	required	required	required	required	required
Written Agreement	available	Available, but cannot establish revenue protection when coverage for crop is not provided in the state	Available, but cannot establish revenue protection when coverage for crop is not provided in the state	available	available	available	available
Guarantee	yield protection guarantee = APH approved yield x coverage level x projected price	revenue protection guarantee = APH approved yield x coverage level x greater of projected price or harvest price	revenue protection guarantee = APH approved yield x coverage level x projected price	policy protection = dollar amount of protection per acre x net acres	policy protection = dollar amount of protection per acre x net acres	policy protection = dollar amount of protection per acre x net acres x HRO policy protection adjustment factor	production guarantee = APH approved yield x coverage level
Rating	continuous individual yield rated	continuous individual yield rated	continuous individual yield rated	area yield rated	area yield rated	area yield rated	continuous individual yield rated
Premium	(1) rate x liability x applicable adjustment percentage factor(s) (2) result of 1 x subsidy (3) result of 1 - 2	(1) rate x liability x applicable adjustment percentage factor(s) (2) result of 1 x subsidy (3) result of 1 - 2	(1) rate x liability x applicable adjustment percentage factor(s) (2) result of 1 x subsidy (3) result of 1 - 2	(policy protection x rate x 0.01) - subsidy	(policy protection x rate x 0.01) - subsidy	(policy protection x rate x 0.01) - subsidy	(1) rate x liability x applicable factor(s) (2) result of 1 x subsidy (3) result of 1 - 2

[1] *See the County Actuarial information to determine availability.*

© 2010 National Crop Insurance Services

Crop Insurance Plan Comparison

The products and product topics summarized in this outline are not all-encompassing and do not substitute for the policy provisions. See the policy provisions and/or contact your company for a complete description of available coverages and their terms and conditions.

NOTE: Beginning with the 2011 crop year, the Crop Revenue Coverage (CRC), Income Protection (IP), Indexed Income Protection (IIP), and Revenue Assurance (RA) plans of insurance have been discontinued. Additionally, Actual Production History (APH) coverage is no longer offered for barley (includes malting type), canola and rapeseed, corn, cotton, grain sorghum, rice, soybeans, sunflowers, and wheat. Instead, a producer may choose to insure these crops utilizing either Yield Protection coverage or Revenue Protection coverage.

Yield Protection (YP) (Plan 01)

YP provides protection against a loss in yield due to unavoidable, naturally occurring events. For most crops, that includes adverse weather, fire, insects, plant disease, wildlife, earthquake, volcanic eruption, and failure of the irrigation water supply due to a naturally occurring event. Like the APH plan of insurance, YP guarantees a production yield based on the individual producer's APH. Unlike the APH plan of insurance, a price for YP is established according to the crop's applicable commodity board of trade/exchange as defined in the Commodity Exchange Price Provisions (CEPP). The projected price is used to determine the yield protection guarantee, premium, any replant payment or prevented planting payment, and to value the production to count. The coverage and exclusions of YP are similar to those for the APH plan of insurance . An indemnity is due when the value of the production to count is less than the yield protection guarantee. Crops covered under this plan include barley (includes malting type), canola/rapeseed, corn, cotton, grain sorghum, rice, soybeans, sunflowers, and wheat.

Revenue Protection (RP) (Plan 02)

Revenue protection provides protection against a loss of revenue caused by price **increase or decrease**, low yields or a combination of both (for corn silage and rapeseed, protection is only provided for production losses). This coverage guarantees an amount based on the individual producer's APH and the greater of the projected price or harvest price. Both the projected price and harvest price are established according to the crop's applicable commodity board of trade/exchange as defined in the Commodity Exchange Price Provisions (CEPP). While the revenue protection guarantee may increase, the premium will not. The projected price is used to calculate the premium and replant payment or prevented planting payment. An indemnity is due when the calculated revenue (production to count x harvest price) is less than the revenue protection guarantee for the crop acreage. Crops covered under this plan include barley (includes malting type), canola/rapeseed, corn, cotton, grain sorghum, rice, soybeans, sunflowers, and wheat. (Please note the "Maximum Price Movement" for rapeseed and corn silage on the following page.)

RP with the Harvest Price Exclusion (RP HPE) (Plan 03)

RP HPE is similar to RP, however RP HPE coverage provides protection against loss of revenue caused by price **decrease**, low yields, or a combination of both. Unlike RP, the revenue protection guarantee for RP HPE is based on the projected price only and it does not increase based on a harvest price. Crops covered under this plan include barley (includes malting type), canola/rapeseed, corn, cotton, grain sorghum, rice, soybeans, sunflowers, and wheat.

Group Risk Plan (GRP) (Plan 04)

GRP coverage is based on the experience of the county rather than individual farms, so while maintaining the insured's actual production history is encouraged, it is not required for this program. GRP indemnifies the insured in the event the payment yield falls below the insured's trigger yield. The Federal Crop Insurance Corporation (FCIC) will issue the payment yield in the calendar year following the crop year insured. Since this plan is based on county yields and not individual yields, the insured may have a low yield on their farm and not receive payment under GRP.

Group Risk Income Protection (GRIP) (Plan 06)

Like GRP, GRIP is based on the experience of the county rather than individual farms, so while maintaining the insured's actual production history is encouraged, it is not required for this program. A GRIP policy includes coverage against potential loss of revenue resulting from a significant reduction in the county yield or commodity price of a specific crop. When the county yield estimates are released, the county revenues will be calculated. An indemnity is due under GRIP when the county revenue published by FCIC is less than the trigger revenue. Since this plan is based on county revenue and not individual revenue, the insured may have a loss in revenue on their farm and not receive payment under GRIP. The Harvest Revenue Option (HRO) Endorsement is available for GRIP (see below).

GRIP with the Harvest Revenue Option (GRIP HRO) (Plan 05)

GRIP HRO is GRIP but with an added Harvest Revenue Option. For additional premium, this option offers "upside" harvest price protection by valuing lost bushels at the harvest price in addition to the coverage offered under GRIP. GRIP HRO will pay a loss when the county revenue is less than the HRO trigger revenue which is calculated using the higher of the projected price or harvest price.

Actual Production History (APH) (Plan 90)

APH is the oldest insurance product listed on this comparison. The APH plan of insurance provides protection against a loss in yield due to nearly all natural disasters. For most crops, that includes drought, excess moisture, cold and frost, wind, flood and unavoidable damage from insects and disease. Like YP, the APH plan of insurance guarantees a yield based on the individual producer's actual production history. Unlike YP, the available price elections are established by the Risk Management Agency. An indemnity is due when the value of the production to count is less than the liability. Of the small grain crops, only oats, rye, flax, and buckwheat remain covered under the APH plan of insurance for the 2011 crop year.

© 2010 National Crop Insurance Services

Crop Insurance Plan Comparison

	YP	RP	RP-HPE	GRP	GRIP	GRIP-HRO	APH
Subsidy Amount	CAT=1.00; basic & optional units @ 50% coverage level=.67; 55-60%=.64; 65-70%=.59; 75%=.55; 80%=.48; 85%=.38; for enterprise units @ 50-70% coverage level=.80; 75%=.77; 80%=.68; 85%=.53; * whole-farm unit	basic & optional units @ 50% coverage level=.67; 55-60%=.64; 65-70%=.59; 75%=.55; 80%=.48; 85%=.38; for enterprise units @ 50-70% coverage level=.80; 75%=.77; 80%=.68; 85%=.53; for whole-farm units @ 50-75% coverage level=.80; 80%=.71; 85%=.56	basic & optional units @ 50% coverage level=.67; 55-60%=.64; 65-70%=.59; 75%=.55; 80%=.48; 85%=.38; for enterprise units @ 50-70% coverage level=.80; 75%=.77; 80%=.68; 85%=.53; for whole-farm units @ 50-75% coverage level=.80; 80%=.71; 85%=.56	CAT=1.00; @ 70-75% coverage level =.59; 80-85%=.55; 90%=.51	@ 70% coverage level=.59; 75-80%=.55; 85%=.49; 90%=.44	@ 70% coverage level=.59; 75-80%=.55; 85%=.49; 90%=.44	CAT=1.00, basic & optional units @ 50% coverage level=.67; 55-60%=.64; 65-70%=.59; 75%=.55; 80%=.48; 85%=.38; for enterprise units @ 50-70% coverage level=.80; 75%=.77; 80%=.68; 85%=.53; * whole-farm unit
Discount for Good Experience	limited availability	not applicable	not applicable	not applicable	not applicable	not applicable	limited availability
High-Risk Land	eligible for coverage	eligible for coverage	eligible for coverage	eligible for coverage	eligible for coverage	eligible for coverage	eligible for coverage
High-Risk Land Exclusion	available	available	available	not available	not available	not available	available
Hail and Fire Exclusion	available; however, restricted for a whole-farm unit	available; however, restricted for a whole-farm unit	available; however, restricted for a whole-farm unit	not available	not available	not available	available; however, restricted for a whole-farm unit
Replanting Requirements	applicable	applicable	applicable	not applicable	not applicable	not applicable	applicable
Replanting Payments	available	available	available	not available	not available	not available	available
Late Planting Provisions	applicable	applicable	applicable	not applicable	not applicable	not applicable	applicable
Prevented Planting Provisions	applicable	applicable	applicable	not applicable	not applicable	not applicable	applicable
Notice of Loss	required	required	required	not required	not required	not required	required
Loss Adjustment Procedure Required	yes	yes	yes	no	no	no	yes
Indemnity If	the production to count x projected price is less than the yield protection guarantee x insured acres	the production to count x harvest price is less than the revenue protection guarantee x insured acres	the production to count x harvest price is less than the revenue protection guarantee x insured acres	the payment yield is less than the trigger yield (expected county yield x coverage level)	the county revenue is less than the trigger revenue (expected county yield x expected price x coverage level)	the county revenue is less than the HRO trigger revenue (expected county yield x the greater of expected or harvest price x coverage level)	the production to count x price election is less than the value of the production guarantee x insured acres

** Currently there are no commodities filed and insured under this insurance plan for which coverage is offered based on whole-farm units, so no subsidy factors are filed as of the date below.*

© 2010 National Crop Insurance Services

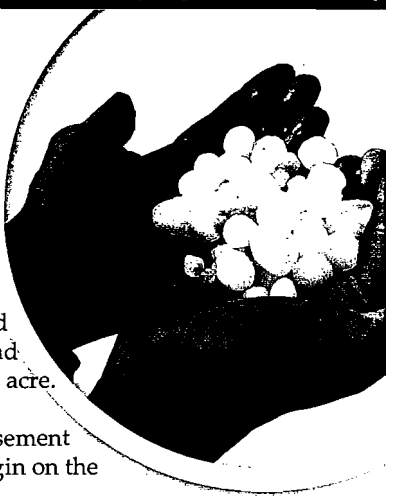
Crop Hail Coverage Indiana 2012

Crop Hail Insurance:

ADM Crop Risk Services offers an outstanding selection of crop protection plans at affordable rates. Hail coverage includes hail, fire, lightning, vandalism, transit, overturn, and collision on a "dollar value per acre" amount that you choose. Crop hail protection coverage (binding) begins two hours after the completed and signed application is received in the home office (217) 233-6901 and continues until June 1 of the following year. Special features include:

- Cash rates for policies paid before August 1st
- Optional deferred billing plan
- A 10% ADM Hail Rate reduction is available on basic hail for customers of ADM Grain. A 5% ADM Hail Rate reduction is available on all deductible hail products for customers of ADM Grain.
- AgriStore, stored grain coverage, is included on hail policies and now begins on the effective date of the new policy.
- Fast, fair claim service
- No minimum claim
- No compulsory replant
- Early season coverage
- Hail Notification System - automated e-mail notifications on hail activity in your county.

What's New For 2012:



1. New Inexpensive Replant Option that pays $50 per acre for replanting corn or soybeans due to perils other than hail.

2. The dollar per acre limits on field corn has increased to $1200/acre and soybeans has increased to $800 per acre.

3. The Agristore mandatory endorsement stored grain coverage will now begin on the effective date of the policy.

4. Signing the application as confirmation of endorsement coverage eliminates the necessity of signing endorsement pages.

5. VPA application due date is now June 1st.

Fire and Lightning:

We cover loss by fire and lightning before harvest and while the crop is still in the harvester. Fire and lightning will not apply to any crop that has been planted into a small grain crop, stubble or residue. We will pay up to $250 for your obligation assumed by contract or agreement for fire department charges incurred when the fire department is called to save or protect the unharvested crop. No Excess Over Loss or Deductible will apply to Fire, Lightning and Transit Coverage or Fire Department Service Charge. Optional fire and lightning coverage for crops planted in small grain stubble is available in selected states for an additional fee.

ADM

ADM Crop Risk Services

ADM Crop Risk Service • 350 North Water Street • Decatur, IL 62523

www.admcrs.com | 888-5-ADMCRS Twitter@ADMCRS | crophail@admcrs.com

Crop Hail Coverage Indiana 2012

Optional Endorsements:

- Canning Reject – Available on Beans and Peas and Sweet Corn.
- Illinois Bundle, Wind 5%; Wind 5% + Extra Harvest; Wind 10%;
- Wind 10% + Extra Harvest; Green Snap 5%; Green Snap 5% + Extra Harvest
- Green Snap 10%; Green Snap 10% + Extra Harvest- Available on Field Corn ONLY
- Popcorn Wind 10% - Available on Popcorn ONLY
- Prevented Plant & Replant (PPRP) and Replant Option Endorsement (RO) – Available on Field Corn & Soybeans Only.
- Seed Corn Endorsement and Seed Corn Wind 10% – Available on Seed Corn ONLY
- SGS Fire & Lightning – Available for an additional rate

Endorsements Options:

1. The Hail mandatory replant endorsement now gives the farmer three different options.
2. Lengthening the insurance coverage period to Dec. 1st for corn, rice, soybeans and sorghum crops and to Sept. 1st for small grains.
3. Reducing Basic Rate & DXS-5 rate for corn, seed corn, sweet corn, milo/grain sorghum, soybeans and rice.
4. The Named Peril-Replant Policy now covers the replanting of second and double crops as well as, crops under a written agreement.

Value per Acre (VPA) Hail

Attaches to a Federal policy and automatically renews each year — provides less paperwork, policy and provisions are issued in late summer, and premium due October 1.

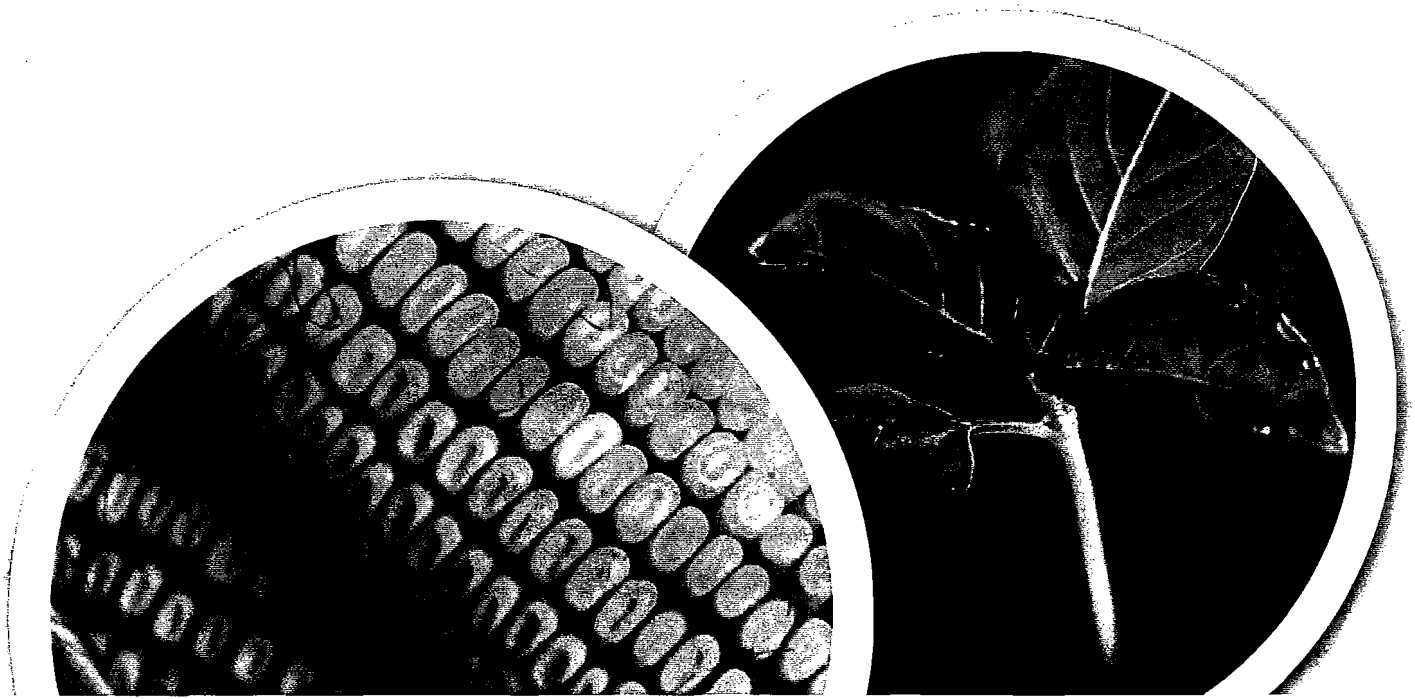
ADM

ADM Crop Risk Services

ADM Crop Risk Service • 350 North Water Street • Decatur, IL 62523

www.admcrs.com | 888-5-ADMCRS Twitter@ADMCRS | crophail@admcrs.com

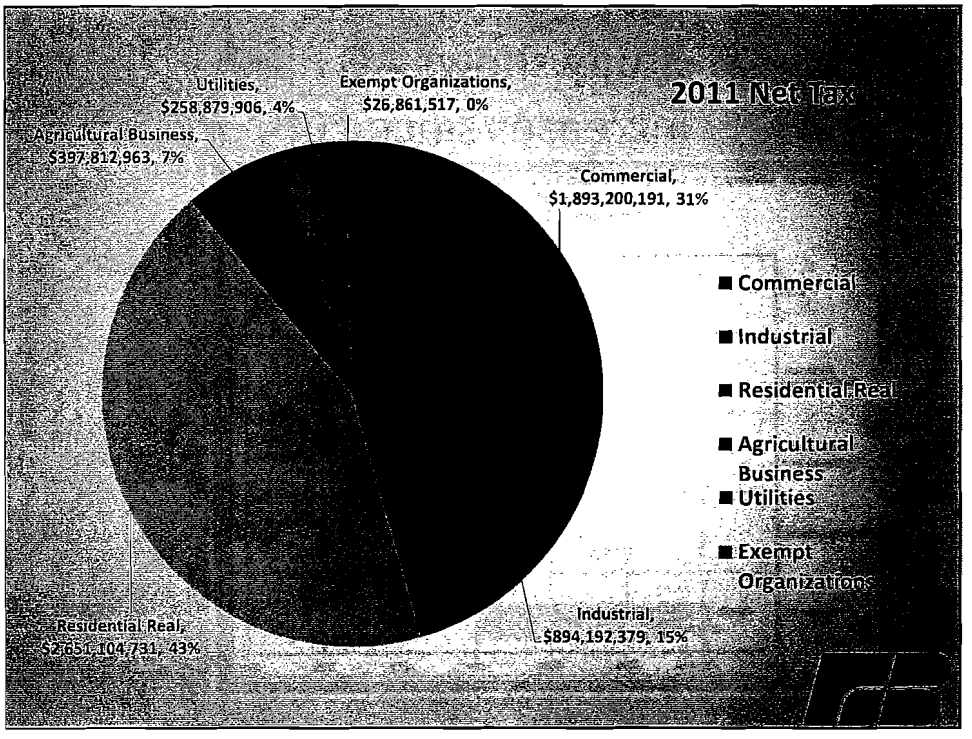
ADM Crop Risk Services is an equal opportunity employer. The products and services described here are written by ADM Insurance Company. The insurance products described here are subject to availability and qualifications. Other terms, conditions, and exclusions may apply. ADM Insurance Company is not licensed in all states. Not all products are available in all states. This does not constitute an offer of any product in any jurisdiction.

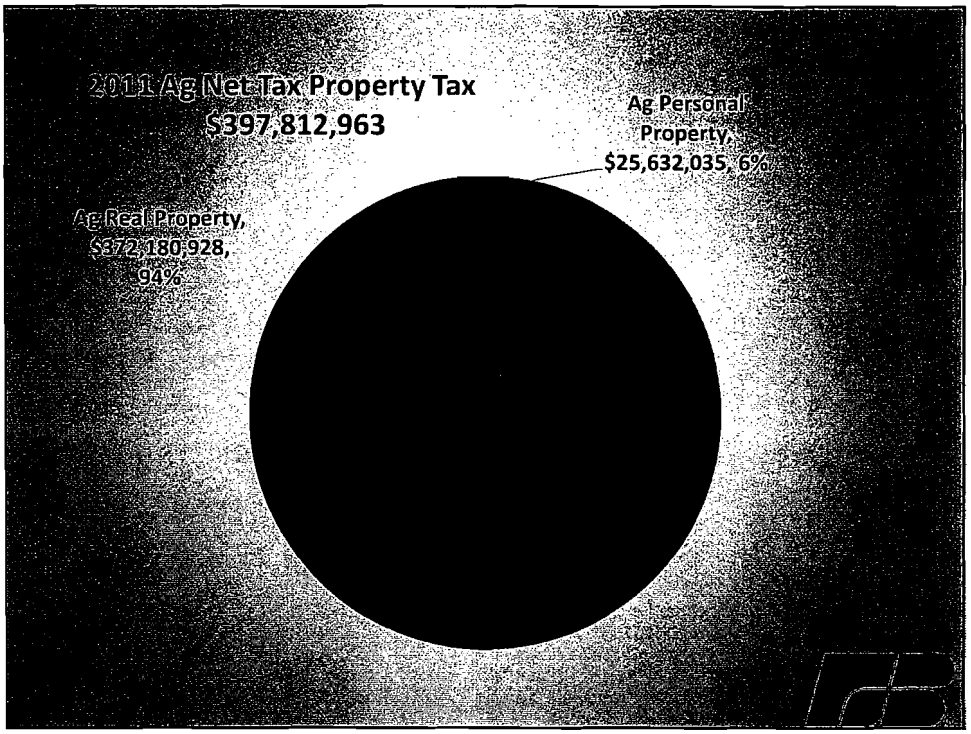


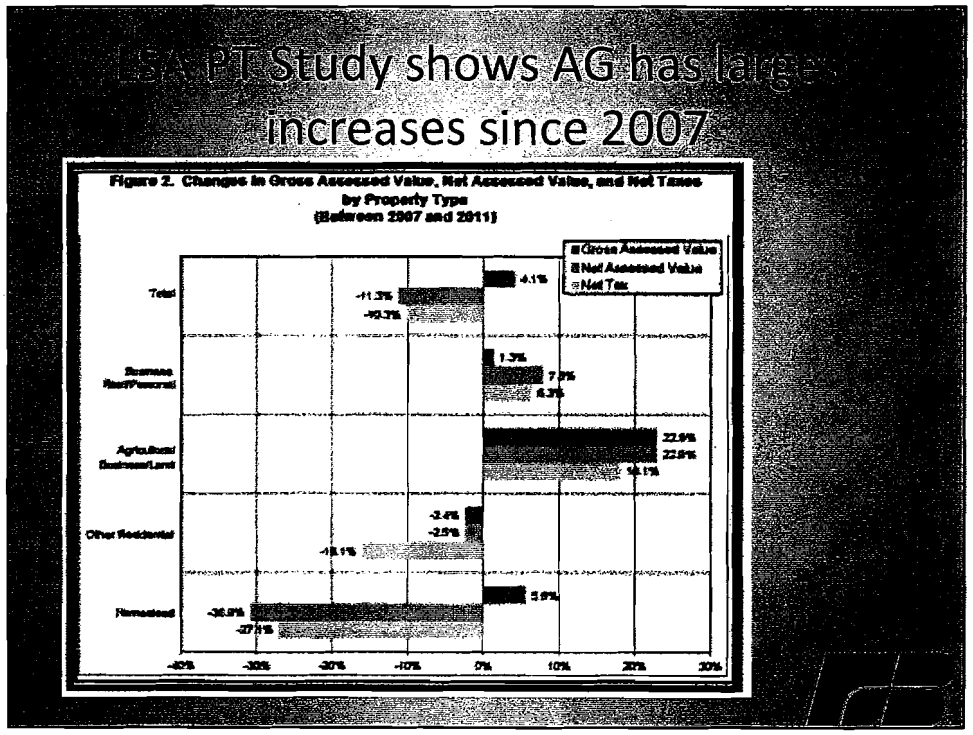
Property Taxes
Farmland Taxes

Interim Study Committee on Agriculture

September 26, 2012




2011 Ag Net Tax Property Tax
$397,812,963
Ag Personal Property, $25,632,035, 6%
Ag Real Property, $372,180,928, 94%


LSA PT Study shows AG has larger increases since 2007
Figure 2. Changes in Gross Assessed Value, Net Assessed Value, and Net Taxes by Property Type (Between 2007 and 2011)
Gross Assessed Value
Net Assessed Value
Net Tax
Total
Other Residential
Remodeled
-40%
-30%
-20%
-10%
0%
10%
20%
30%

Assessed as Farmland?

- Indiana Code section 6-1.1-4-13(a) declares, "In assessing or reassessing land, the land shall be assessed as agricultural land only when it is devoted to agricultural use" [emphasis added]. Indiana Code section 6-1.1-4-13(d) states, —This section does not apply to land purchased for industrial, commercial, or residential uses.
- However, land —purchased for an industrial, commercial, or residential uses shall not be assessed as agricultural land.
- Additionally, all land utilized for agricultural purposes is valued as agricultural land -- using a statewide base rate and a soil productivity index system.
- Parcel size does not matter.

Farmland Formula

Base Value

x Soil Productivity Factor

x Influence Factors

= Market Value in Use per Acre

Farmland Base Value

- Market Value in Use rather than Sales Price
- Net income per acre (corn & soybeans) includes higher yield and higher commodity prices
- Capitalized by average of land and operating borrowing rates from Chicago Federal Reserve
- Average of lowest five years of last six years where data is available

STATE OF INDIANA

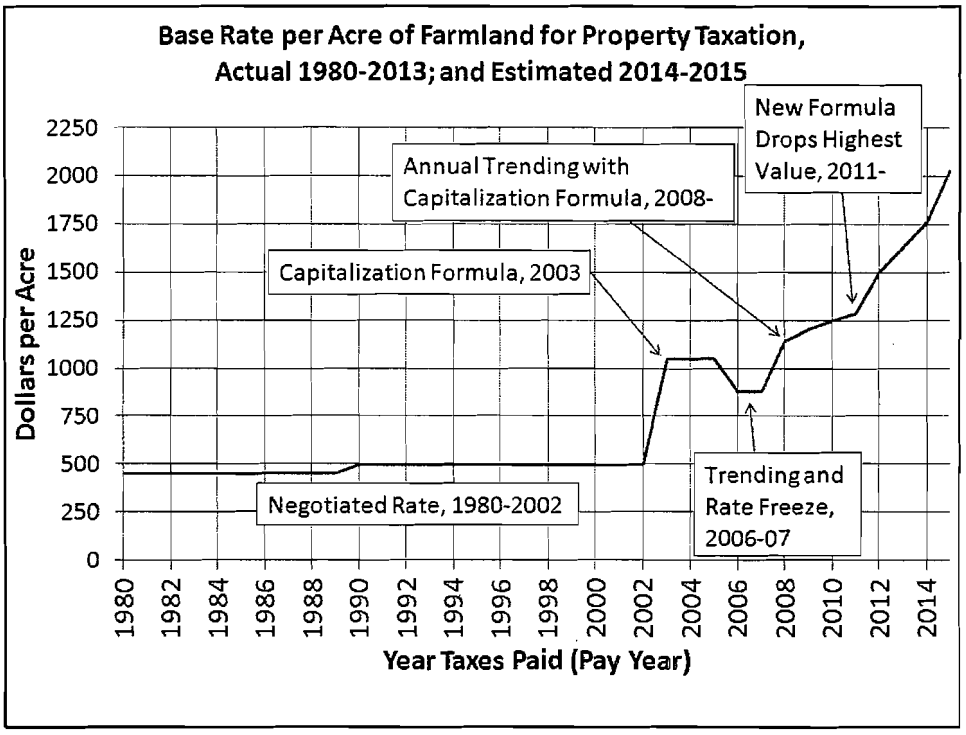
DEPARTMENT OF LOCAL GOVERNMENT FINANCE

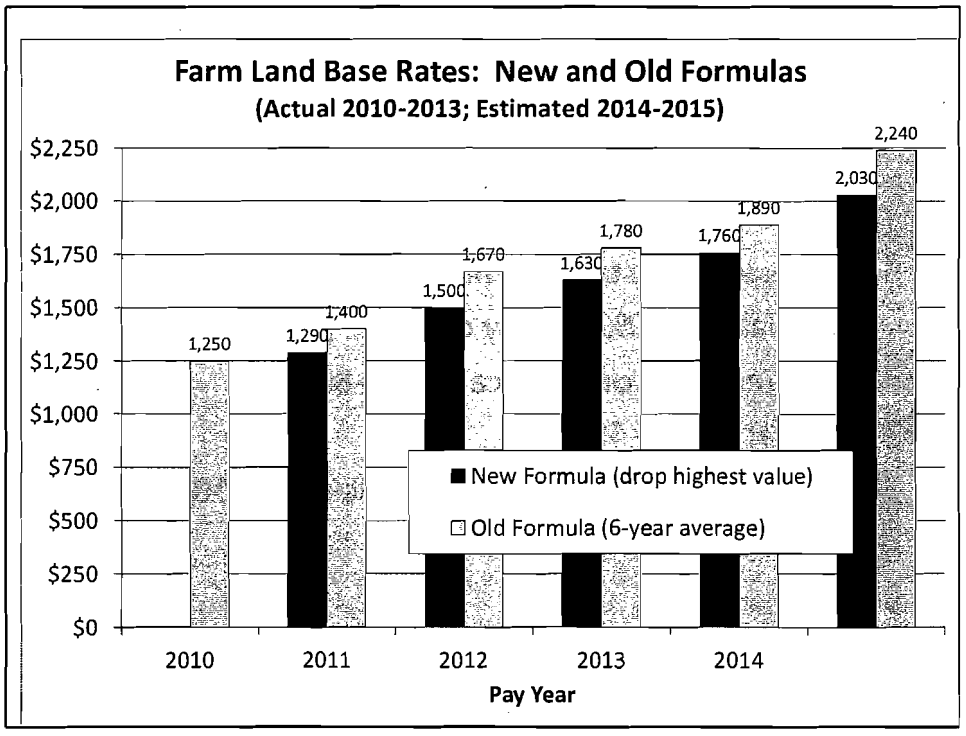
INDIANA GOVERNMENT CENTER NORTH
100 NORTH SENATE AVENUE N1058
INDIANAPOLIS, IN 46204
PHONE (317) 232-3761
FAX (317) 232-8779

Agricultural Land Base Rates For The Assessment Dates: March 1, 2005 – 2012

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Tax Year											
12 Pay 13								$1.630 ***			
11 Pay 12						$1.500 **					
[illegible]											
09 Pay 10					$1.250						
08 Pay 09				$1.200							
07 Pay 08**			$1.140**								
[illegible]											
05 Pay 06			$880								

We have made progress in formula, but hard to overcome all market forces.


Base Rate per Acre of Farmland for Property Taxation,
Actual 1980-2013; and Estimated 2014-2015
New Formula Drops Highest Value, 2011-
Annual Trending with Capitalization Formula, 2008-
Capitalization Formula, 2003
Negotiated Rate, 1980-2002
Trending and Rate Freeze, 2006-07
Dollars per Acre
2250
2000
1750
1500
1250
1000
750
500
250
0
1980
1982
1984
1986
1988
1990
1992
1994
1996
1998
2000
2002
2004
2006
2008
2010
2012
2014
Year Taxes Paid (Pay Year)


Farm Land Base Rates: New and Old Formulas
(Actual 2010-2013; Estimated 2014-2015)
$2,250
$2,000
$1,750
$1,500
$1,250
$1,000
$750
$500
$250
$0
1,250
1,290
1,400
1,500
1,670
1,630
1,780
1,760
1,890
2,030
2,240
New Formula (drop highest value)
Old Formula (6-year average)
2010
2011
2012
2013
2014
Pay Year

Farmland Formula

Base Value

x Soil Productivity Factor

x Influence Factors

= Market Value in Use per Acre

Ag Land Use Types determine Influence Factors that are deductions from value

- Classified - forest, windbreaks , etc -100%
- Tillable, various stages of flooding – 30% to -50%
- Non-tillable (<50% canopy or perm. pasture) -60%
- Woodland (50% or more canopy) -80%
- Other farmland -40%
- Ag support land – legal ditch, public roads -100%

Farmland Formula

Base Value

x Soil Productivity Factor

x Influence Factors

= Market Value in Use per Acre

DLGF adopted new SPF's
LSA Analyzed impact

- Changed factors
  - .5 to 1.28
  - .5 to 1.66
- Average increase tax from SPF change = 25.5%
  Lowest increase in Benton Co 10.5%
- Highest increase in Crawford Co 33%
- Statewide est. increase per yr = $57.4 Million

Soil Productivity Factors
IC 6-1.1-4-13(b) delayed in SB 19

- b) The department of local government finance shall give written notice to each county assessor of:
  - (1) the availability of the United States Department of Agriculture's soil survey data; and
  - (2) the appropriate soil productivity factor for each type or classification of soil shown on the United States Department of Agriculture's soil survey map.
- All assessing officials and the property tax assessment board of appeals shall use the data in determining the true tax value of agricultural land. However, notwithstanding the availability of new soil productivity factors and the department of local government finance's notice of the appropriate soil productivity factor for each type or classification of soil shown on the United States Department of Agriculture's soil survey map for the March 1, 2012, assessment date, the soil productivity factors used for the March 1, 2011, assessment date shall be used for the March 1, 2012, assessment date. New soil productivity factors shall be used for assessment dates occurring after March 1, 2012.

Chapter 2 Land Real Property Assessment Guidelines : Understanding the Calculation of the Soil Productivity Index

- For the purpose of defining the agricultural land assessment formula, each of the approximately 2,400 soil map units in Indiana is assigned a productivity rating. This rating is based on average estimated crop yields, which in turn are based on the physical properties of the soil, such as:
  - slope
  - moisture holding capacity
  - natural drainage class
  - depth of rooting
  - amount of surface soil remaining
  - organic matter content
  - various other soil characteristics.

Chapter 2 Land Real Property Assessment Guidelines : Understanding the Calculation of the Soil Productivity Index

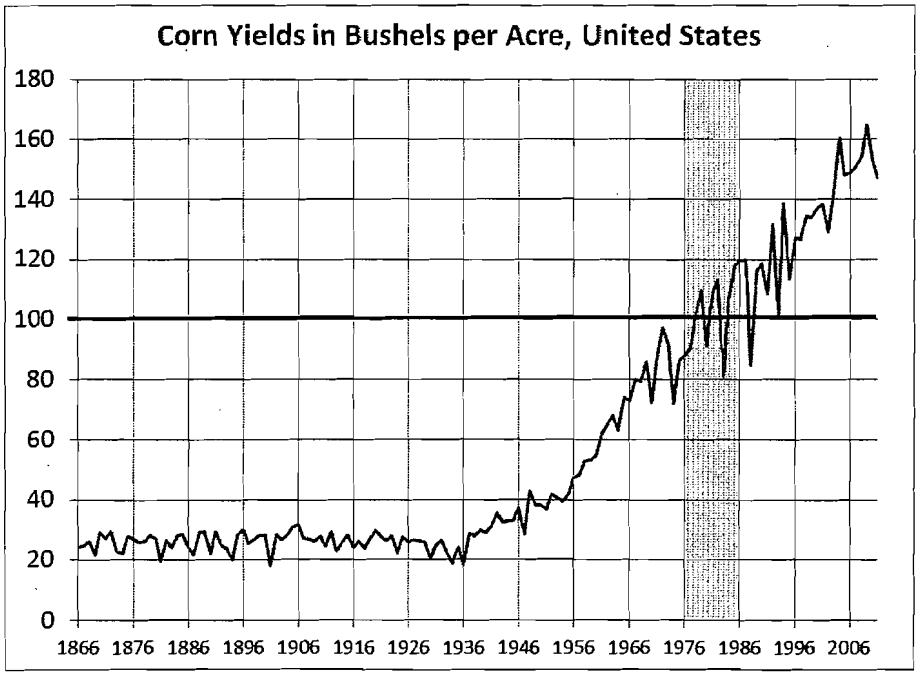
- Soil productivity ratings in Indiana are based on corn yield estimates. Estimated corn yields are the most convenient and reliable yield estimates since no other crop is grown on a wider range of soils or over a larger area in the state. Estimated corn yields are based on an average level of crop management and reflect a 10-year average. Estimates of corn yields for particular soil map units are tested using data collected by Purdue University and the U.S. Department of Agriculture, Natural Resource Conservation Service from field trials, yield tests, and producer experiences. An average level of crop management is assumed to account for variations in the amount of fertilizer used, time of planting, hybrid performance, and tillage systems--crop management factors that can cause yield differences. Thus, the soil productivity ratings reflect the yield differences caused by the properties of the soil, not the crop management decisions made by agricultural producers.

Chapter 2 Land Real Property Assessment Guidelines : Understanding the Calculation of the Soil Productivity Index

- The productivity factor for a soil map unit is calculated by dividing the estimated 10-year average corn yield (calculated in bushels per acre) by 100. Productivity factors do not accurately predict the actual yields for a particular year since weather has a great influence on actual yields. However, you can think of the soil productivity index as a relative ranking of soil map units. The more productive the soil, the higher the rating. **The best soil in the state has a productivity factor of approximately 1.28; the poorest soil has a productivity factor of .50.**

Soil Productivity Factors

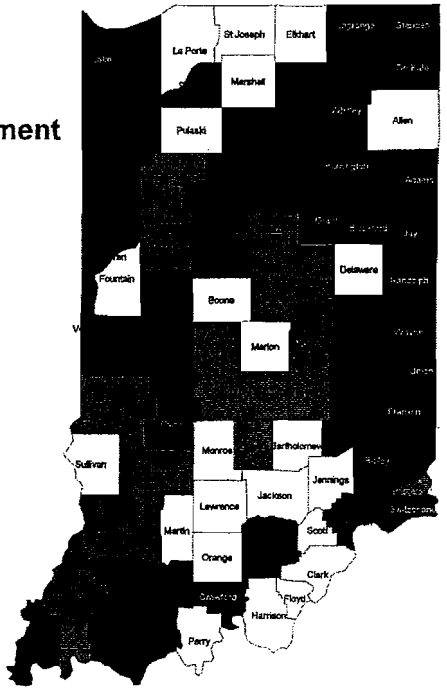
- Compare productive potential of one soil to another
- Rank soils based on productive properties
- Relate productive potential



Soil Productivity Factors

- Ave Yield in late "70's = 100
- Yield / 100 = SPF
- Worked in 1979
- Ave Yield now = 160
- Should be yield / 160 not 100

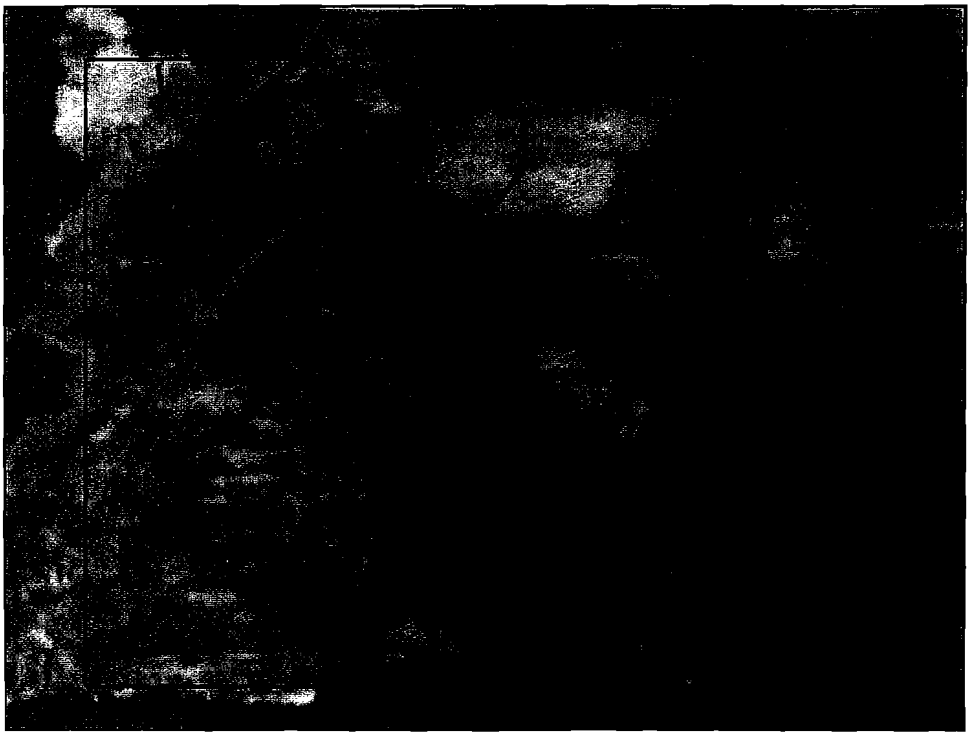
Percent Change in Weighted Average Soil Factors, 2012-13 Reassessment



Soil Factor Change
- 15.0% to 24.0%
- 24.0% to 28.0%
- 28.0% to 45.0%
- No data

Right or Wrong?

- Old Weighted Average = .958
- New Weighted Average = 1.203
- Change the definition of soil productivity factors.
- Based on increased yields that are already reflected in the farmland base value.
- No input from the agricultural community or assessors.
- Not based on yield research data.
- Not uniform across Indiana.



41% Increase
Actual Pulaski Co Example

Land Type 4=tillable 81=Legal Drains 82=public Roads	Pricing Method A=Agriculture	Soil ID	Measured Acres	Current Soil Productivity Factor	Base Rate Pay 2013	Adj. Rate	Ext. Value	Influence Factor%	Value
4	A	GmnA	1.50	1.02	$1,630	$1,663	$2,494	0.00%	$2,500
4	A	MgzA	0.80	0.85	$1,630	$1,386	$1,108	0.00%	$1,110
4	A	MtpA	6.60	0.81	$1,630	$1,320	$8,714	0.00%	$8,720
81								-100.00%	$0
82								-100.00%	$0
									$12,330

Land Type 4=tillable 81=Legal Drains 82=public Roads	Pricing Method A=Agriculture	Soil ID	Measured Acres	Proposed Soil Productivity Factor	Base Rate Pay 2013	Adj. Rate	Ext. Value	Influence Factor%	Value
4	A	GmnA	1.50	1.28	$1,630	$2,086	$3,130	0.00%	$3,130
4	A	MgzA	0.80	1.15	$1,630	$1,875	$1,500	0.00%	$1,500
4	A	MtpA	6.60	1.19	$1,630	$1,940	$12,802	0.00%	$12,800
81								-100.00%	$0
82								-100.00%	$0
									$17,430

Problems with new SPF's

- Change the definition of soil productivity factors and moving away from comparing one soil's productive potential to that of another soil type
  - Math
- Based on increased yields that are already reflected in the farmland base value.
- Changed without any input from the agricultural community or notice to the county assessors.
- Based on higher predicted yields that were not determined based on scientific data.
  - Data
- Changes to the new soil productivity factors were not uniformly updated across the state of Indiana.
  - Uniformity

LEGISLATIVE SERVICES AGENCY
Office of Fiscal and Management Analysis
200 W. Washington Street, Suite 302
Indianapolis, Indiana 46204-2789
(317) 233-0696
(317) 232-2554 (FAX)

MEMORANDUM

To: Interested Parties

From: Bob Sigalow

Re: Soil Productivity Factors

Date: February 15, 2012

The Department of Local Government Finance (DLGF) released new soil productivity factors on February 2, 2012. These factors are intended for use in farmland assessments beginning with the 2012 Pay 2013 tax year. This memo describes an analysis of the new factors.

Each farmland assessment begins with the base rate which is $1,500 per acre for Pay 2012 and $1,630 for Pay 2013. The base rate is then adjusted by the soil productivity factor and influence factors to calculate the assessed value for a particular parcel. Each parcel may have multiple soil types.

LSA's property tax database contains detailed land data from most counties. It was determined that the land data for 69 counties could be used in this analysis. Therefore, the following analysis reflects estimated changes only in those 69 counties. The 69 included counties represent 77.6% of the total farmland acreage and 79.6% of the Pay 2012 farmland AV.

The Pay 2012 soil productivity factors range from 0.5 to 1.28 with an acreage-weighted average of 0.958. The Pay 2013 factors will range from 0.5 to 1.66 with a weighted average of 1.203, or a 25.5% increase in the average.

The new soil productivity factors were introduced into LSA's property tax model to estimate the resulting tax shift for taxes payable in 2013. For the 69 counties, farmland net taxes are estimated to increase by about $45.7 M, or 18.5% over the estimated 2013 net tax using the old soil productivity factors. Net taxes for all other property would decline. There would be an overall total increase in net taxes of $8.2 M.

Circuit breaker losses for local civil taxing units and school corporations would fall by $9.8 M and TIF proceeds would decline by $1.6 M. The following table shows the results by property class.

Estimated Change in 2013 Net Taxes for 69 Counties From Implementation of New Soil Productivity Factors		
Property Type	**Net Tax Change**	**Percent Change**
Farmland	$ 45.7 M	18.5%
Homesteads	$ -14.2 M	-1.2%
Apartments	$ -0.2 M	-0.2%
Other Residential	$ -3.8 M	-0.8%
Ag Business (except Farmland)	$ -3.9 M	-4.6%
Other Real Property	$ -6.8 M	-0.7%
Personal Property	$ -8.5 M	-1.5%
Total	**$ 8.2 M**	**0.2%**

The estimated change in Pay 2013 net taxes on farmland for each of the 69 included counties is contained in the attached report. All 69 counties have estimated increases. The smallest increase is 10.5% in Benton County and the largest is 33.0% in Crawford County.

If it is assumed that the experience for the 69 included counties is representative of the expected changes statewide, then the estimated statewide increase in Pay 2013 net taxes for farmland can be estimated to be about $57.4 M.

Soil Productivity Factor Updates
69 Counties

		Estimated Pay 2013 Farmland Net Tax			
Cnty	County	Old Factors	New Factors	Tax Change	% Change
01	Adams	4,581,581	5,535,800	954,219	20.8%
02	Allen				
03	Bartholomew				
04	Benton	4,982,400	5,504,285	521,885	10.5%
05	Blackford	2,120,663	2,654,298	533,634	25.2%
06	Boone				
07	Brown	160,919	195,308	34,389	21.4%
08	Carroll	4,213,814	4,879,169	665,355	15.8%
09	Cass	5,617,168	6,517,490	900,322	16.0%
10	Clark				
11	Clay	3,263,133	3,693,573	430,440	13.2%
12	Clinton	5,771,439	6,676,727	905,288	15.7%
13	Crawford	1,191,591	1,585,039	393,447	33.0%
14	Daviess	5,059,134	5,978,354	919,220	18.2%
15	Dearborn	1,469,542	1,818,784	349,242	23.8%
16	Decatur	3,288,964	3,884,110	595,146	18.1%
17	DeKalb	3,122,180	3,954,586	832,405	26.7%
18	Delaware				
19	Dubois	3,140,232	3,671,962	531,730	16.9%
20	Elkhart				
21	Fayette	2,861,574	3,590,820	729,246	25.5%
22	Floyd				
23	Fountain				
24	Franklin	2,105,928	2,569,470	463,542	22.0%
25	Fulton	3,597,364	4,234,832	637,468	17.7%
26	Gibson	5,280,607	6,198,363	917,757	17.4%
27	Grant	5,232,143	6,294,094	1,061,951	20.3%
28	Greene	3,749,258	4,389,522	640,264	17.1%
29	Hamilton	4,047,138	4,704,977	657,839	16.3%
30	Hancock	4,612,907	5,361,167	748,260	16.2%
31	Harrison				
32	Hendricks	4,831,042	5,695,903	864,861	17.9%
33	Henry	5,468,639	6,793,280	1,324,641	24.2%
34	Howard	4,477,845	5,344,330	866,485	19.4%
35	Huntington	4,173,450	5,034,776	861,325	20.6%
36	Jackson				
37	Jasper	1,197,826	1,479,494	281,668	23.5%
38	Jay	5,053,940	6,254,447	1,200,507	23.8%
39	Jefferson	2,890,591	3,548,443	657,852	22.8%
40	Jennings				
41	Johnson	3,514,987	4,114,415	599,428	17.1%
42	Knox	5,630,424	6,473,314	842,890	15.0%
43	Kosciusko	4,468,846	5,412,226	943,381	21.1%
44	LaGrange	2,268,217	2,818,376	550,159	24.3%
45	Lake	3,608,156	4,629,153	1,020,997	28.3%
46	LaPorte				
47	Lawrence				
48	Madison	6,545,450	7,730,630	1,185,180	18.1%
49	Marion				

Soil Productivity Factor Updates
69 Counties

		Estimated Pay 2013 Farmland Net Tax			
Cnty	**County**	**Old Factors**	**New Factors**	**Tax Change**	**% Change**
50	Marshall				
51	Martin				
52	Miami	3,898,223	4,587,268	689,045	17.7%
53	Monroe				
54	Montgomery	6,406,810	7,546,324	1,139,514	17.8%
55	Morgan	1,681,773	1,927,295	245,523	14.6%
56	Newton	5,646,351	6,522,146	875,795	15.5%
57	Noble	4,007,990	4,854,335	846,345	21.1%
58	Ohio	166,811	197,026	30,215	18.1%
59	Orange				
60	Owen	2,537,416	3,133,118	595,702	23.5%
61	Parke	3,101,220	3,530,641	429,421	13.8%
62	Perry				
63	Pike	2,639,207	3,143,246	504,039	19.1%
64	Porter	2,549,180	3,071,649	522,469	20.5%
65	Posey	4,148,985	4,870,986	722,001	17.4%
66	Pulaski				
67	Putnam	3,976,166	4,680,591	704,424	17.7%
68	Randolph	5,862,538	6,785,528	922,990	15.7%
69	Ripley	2,787,365	3,400,880	613,515	22.0%
70	Rush	4,734,329	5,331,147	596,818	12.6%
71	St. Joseph				
72	Scott				
73	Shelby	4,441,958	5,016,712	574,754	12.9%
74	Spencer	3,249,543	3,863,418	613,875	18.9%
75	Starke	2,573,963	3,061,601	487,638	18.9%
76	Steuben	1,453,581	1,821,576	367,995	25.3%
77	Sullivan				
78	Switzerland	716,507	883,566	167,059	23.3%
79	Tippecanoe	4,580,388	5,486,654	906,266	19.8%
80	Tipton	3,964,971	4,440,594	475,623	12.0%
81	Union	2,251,533	2,655,670	404,138	17.9%
82	Vanderburgh	1,218,688	1,420,967	202,279	16.6%
83	Vermillion	2,748,027	3,275,382	527,355	19.2%
84	Vigo	3,697,553	4,423,609	726,055	19.6%
85	Wabash	3,068,525	3,640,058	571,533	18.6%
86	Warren	3,683,225	4,083,290	400,065	10.9%
87	Warrick	2,344,064	2,810,937	466,873	19.9%
88	Washington	4,191,045	4,964,041	772,996	18.4%
89	Wayne	2,555,189	3,273,740	718,551	28.1%
90	Wells	3,421,342	4,038,226	616,885	18.0%
91	White	5,576,483	6,409,610	833,128	14.9%
92	Whitley	3,424,486	4,214,416	789,930	23.1%
	Total	**246,904,525**	**292,587,764**	**45,683,239**	**18.5%**

Minimum Change	10.5%
Maximum Change	33.0%