

ILLINOIS RURAL POLICY DIGEST



Illinois Agricultural Policy Center
Department of Agricultural and Consumer Economics
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Here We Go ...

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It is truly our pleasure to offer this first issue of the *Illinois Rural Policy Digest* — a quarterly publication that will review and discuss current policy issues related to Illinois agriculture and rural areas. The general purpose of the *Digest* is to provide timely and useful information to quite a wide audience, including policy makers, extension personnel, leaders within the agribusiness and lending community, producers and their organizations, local officials, and others. As you look through this and subsequent issues, it will be obvious that we are not pursuing any awards for style and design. Our hope, however, is that content more than makes up for the lack of gloss.

This and future issues of the Illinois Rural Policy Digest can be found in the policy section of the farmdoc website, www.farmdoc.uiuc.edu.

The content takes advantage of faculty expertise at the University of Illinois. *Digest* authors will include scholars in such areas as farm policy, natural resource and environmental economics, regional science, ag credit and finance, marketing, rural health, law, agribusiness management, industrial organization, trade, and consumer economics. Each issue will contain three or four articles. As the name “*Digest*” implies, the articles are summaries. If more detail is desired, readers are encouraged to contact the authors directly.

Readers are also encouraged to provide suggestions for future articles. Please take advantage of the *Digest's* outreach orientation by “reaching back” toward us, particularly with article ideas. You are the audience that we are trying to serve — if that is not happening then we are wasting our time. We truly want to hear back from you.

In closing we would like to thank and acknowledge a few groups who are making this effort possible. First, the Council on Food and Agricultural Research (C-FAR), through its Sentinel Program, has assisted in the development of an Ag Policy Center in the Department of Agricultural and Consumer Economics. The *Digest* is one product of this Center. Second, the University of Illinois Extension is always ready and willing to support these types of outreach efforts, and this is no exception. Finally, while we appreciate and thank C-FAR and Extension for providing the vehicle, the drivers of this forum are individual faculty members providing their thoughts and time to help meet the Land Grant mission of the University of Illinois.

In this issue ...

We start by offering a few thoughts on what “Rural America” is, at least in the eyes of federal agencies that define it for policy purposes. Some highlights of the 2002 Farm Bill are then presented, followed by a discussion of the acre and yield updating decisions now facing farmers. ❖

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Defining Rural America

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Underlying every discussion of rural policy — be its focus on farming, schools, economic development, transportation, water quality, or any other aspect of rural life and economic competitiveness — is some image or notion of what is rural and what are rural conditions. Creating good policy requires getting “rural” right; that is, making sure our images match reality. Doing so is not easy. The official definitions governing our statistics often prevent us from seeing the real conditions of Rural America. This article discusses how the U.S. Department of Agriculture and other federal agencies define Rural America and what those definitions imply for rural policy.

What is rural?

Statistical systems of most U.S. agencies do not define rural directly. Although metropolitan and urban are defined precisely, rural is simply what is left over. It is that part of the nation that does not qualify as metropolitan or urban. When making policy, a clear idea of its target is very helpful. For something that is defined simply by what it is “not” — not urban or not metropolitan — making good policy is more difficult. Furthermore, this non-definition of rural leads us to perceive Rural America as a relatively slow growing, small part of the nation. It also encourages us to look backwards, not forward, and it hides large parts of Rural America. In 2000, for example, there were 1.2 million farmers in officially metropolitan areas.

Every decennial census brings apparent evidence of rural decline. For instance, the 1950 census revealed 12 percent fewer farms than in 1940, seven million fewer people on farms, and a smaller rural

share of the nation’s population, down from 47 percent to 43 percent. Urban America grew over three times faster than Rural America during that period (22 percent population growth versus six percent). Every time we look backwards like this, we see a dwindling Rural America.

Looking forward reveals a very different policy context and a different future for Rural America. Take 1950 as the vantage point again, but this time look ahead to 2000. Rural America’s population grew faster than Urban America’s (95 percent versus 79 percent). Rural America added 63 million residents to reach 128 million, and its share of the nation’s population increased to 46 percent. The U.S. Department of Agriculture, however, says, “Rural America is home to a fifth of the Nation’s people” (<http://www.ers.usda.gov/Emphases/Rural/>) — a fifth, not 46 percent. Both are true, 46 percent and 20 percent. The difference is all a matter of whether one looks forward or backwards, and for policy we must look forward to the future we are trying to shape. Our statistical system encourages us, however, to look backwards.

The federal government follows an elaborate process to define the criteria for designating metropolitan counties. Key requirements are a city or other concentration of population of 50,000 or more, a total metropolitan population of at least 100,000, and commuting patterns that link adjacent counties to the urban core. Thus, a metropolitan area consists of one or more

counties. Counties not in metropolitan areas are called non-metropolitan, a term very often used interchangeably with Rural America.

Counties change status, usually because of population growth. When a town grows large enough to meet the urban area requirement, its county becomes metropolitan and, thus, leaves Rural America. Similarly, when a large city spreads outward into the surrounding countryside of a neighboring county, whose residents commute to work in the metropolitan

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area, that outlying county also becomes metropolitan. Change in the rules for calculating the high density urban area or other criteria also lead to additional counties becoming metropolitan. Political pressure on this process favors making more counties metropolitan because that status makes them eligible for certain funding programs aimed at urban areas and gives them a higher profile in industrial location, marketing, and other private sector decisions.

Looking forward, not backwards

Rural America lost 568 counties between 1950 and 1999. This period starts with the first time that metropolitan counties were designated with a standard federal system and ends with the most recent designation. This large part of the country, call it “Formerly Rural America,” must not be forgotten when considering rural policy. Formerly Rural America is the fastest growing part of the nation — adding 50 million people between 1950 and 2000. It tripled in population, growing 216 percent, while the rest of Rural America grew 30 percent and Urban America grew 79 percent.

When we look backwards at rural change, starting with today’s county designations, we see only the 30 percent growth of the remaining Rural America. We think that Rural America is the relatively stagnant part of the nation and that rural policy should ameliorate decline. But for rural policy, we must look forward to the future. We must remember Formerly Rural America and recognize that large parts of today’s Rural America will be growing rapidly — and then leave the official Rural America. Understanding the pressures and opportunities that growth brings to rural life and rural institutions is an important element of rural policy.

Despite the relatively slow growth of the Midwest, Illinois is no exception. Today Illinois has 28 metropolitan counties, up from 13 in 1950. The 15 counties of Formerly Rural Illinois were the fastest growing part of the state, doubling in population between 1950 and 2000 while the remaining counties of Rural Illinois grew only 0.3 percent and the original Urban Illinois grew 50 percent. Looking backwards, we see a Rural Illinois of 74 counties whose total population is almost unchanged since 1950, up fewer

than 6,000 people in 50 years. Totally lost from view are the 15 rural counties who gained 594,000 people.

The metropolitan data system hides the realities of Rural Illinois in another way. Take the 15 metropolitan counties of Formerly Rural Illinois. According to the 1997 Census of Agriculture, these metro counties contain 4.6 million acres of farmland. In fact, 82 percent of the land area of these “urban” counties is farmland. Even the 13 Illinois counties that were metropolitan in 1950 remain notably rural. They contain 2.9 million acres of farmland, a full 56 percent of their land area. Only three Illinois counties are less than 50 percent farmland: Cook, DuPage, and Lake, the core of the Chicago area. At the other extreme among today’s metropolitan counties, McLean (Bloomington-Normal) is 92 percent farmland, DeKalb 90 percent farmland, and Champaign 89 percent farmland. This peculiar situation — an Urban Illinois comprised mostly of farmland — stems from the statistical practice of using counties to define metropolitan areas. Farmland is metropolitan when it is in a county that contains an urban area of 50,000 people or has a high percentage of its residents who commute to work in such an area.

The rural economy

Metropolitan and, by default, rural are defined on a county basis largely because of the general lack of economic and social data on a finer geographical scale. Data on earnings and employment by place of work are available annually for the nation’s counties from the U.S. Department of Commerce, but nothing similar exists below the county level. New techniques for processing spatial data, that is, data with precise geographical information, may change the situation, perhaps before the next census. For now, though, after carefully considering all the alternatives for defining metropolitan areas, the Office of Management and Budget decided in 2000 to retain the use of counties as the building blocks. Therefore, most federal agencies use the imperfect metropolitan and non-metropolitan dichotomy when studying the rural economy or implementing policy.

The dichotomy suffices to show some noteworthy ways rural and metropolitan economies differ. Rural America depends more on manufacturing,

farming, state and local government, retail trade, and mining. For example, manufacturing provided 20 percent of earnings in Rural America, 17 percent in Formerly Rural America, and 15 percent in Urban America in 2000, while farming (including government payments) provided four percent of earnings to Rural America, one percent to Formerly Rural America, and 0.2 percent to Urban America. The relatively more important manufacturing industries in Rural America produce resource based products, such as lumber and wood, food, textiles, and paper, while electronics, instruments, and chemical products account for larger shares elsewhere. For most manufacturing industries, however, the difference between rural and the rest of the nation is less than half a percent. Motor vehicles and equipment, for example, provides 1.4 percent of earnings in Rural America and 1.1 percent elsewhere. .

Services, finance, insurance, and real estate, and wholesale trade have markedly smaller shares of earnings in rural areas. The service sector provides 20 percent of rural earnings, but 26 percent in Formerly Rural America and 32 percent in Urban America. The main difference is business, engineering, and management services, not services for people, such as health, household, and social services or hotels and membership organizations. Business services alone provide three percent of rural earnings but eight percent elsewhere.

The biggest difference between the rural economy and the rest of the country is not industrial composition. The rural economy depends relatively heavily on transfer payments, whose largest categories in Rural America are retirement and disability payments (42 percent of total transfers), Medicare and Medicaid payments (38 percent), income maintenance (nine percent), veterans' payments (three percent), and unemployment benefits (two percent). Altogether, transfer payments are equivalent to 31 percent of total earnings in Rural America, but only 21 percent in Formerly Rural America and 14 percent in Urban America. Commuting across county lines to work is also more important in Rural America. It adds eight percent to earnings in Rural America and 20 percent in Formerly Rural America, while totaling a seven percent drain of earnings for Urban America. Income from dividends, interest, and rent is also more

important in Rural and Formerly Rural America than in Urban America (32, 31, and 22 percent of earnings, respectively).

These numbers suggest the importance to rural areas of policies that affect transfer income and dividends, interest, and rent, as well as transportation investment that facilitates commuting from rural areas. Farm policy is obviously important to many rural areas, but policies affecting other industries are important to Rural America, too. While there are almost 500 rural counties in which farming provides more than ten percent of county earnings, manufacturing reaches that level for more than 1300 counties, health services almost 300, state government over 200, and mining, lumber and wood products, and federal civilian about 100 each. These numbers are underestimates for the private industries because of data suppression, but they suffice to make the point that rural counties are diverse. Defining rural on the basis of primary industries, including farming and mining, misses the picture given the wide variety of industries that can dominate rural counties.

New concepts: metropolitan, micropolitan, and rural

The Office of Management and Budget has announced major changes in the system for defining metropolitan areas (*Federal Register*; December 27, 2000). The basic idea remains the same: "a recognized population nucleus and adjacent communities that have a high degree of integration with that nucleus," (p. 82228). Starting in 2003, however, metropolitan areas will be joined by micropolitan areas. Whereas an "urbanized area" with at least 50,000 residents forms the population nucleus for a metropolitan area, an "urban cluster" with at least 10,000 residents forms the micropolitan nucleus. The counties with these nuclei are the "central counties," to which "outlying counties" are added when 25 percent of their residents work in the central counties or 25 percent of the jobs in the outlying counties are filled by workers from the central counties. Counties not in the metropolitan or micropolitan areas will be officially "Outside Core Based Statistical Areas."

Based on previous practice with non-metropolitan counties, chances are very good that "outside core

based statistical areas” will become synonymous with rural in popular usage. With the nation thus divided into metropolitan, micropolitan, and rural, the new system will exacerbate the problems of looking backwards and hiding Rural America. Much of today’s Rural America will be reclassified into micropolitan, and over time more and more parts of Rural America will reach the population and commuting thresholds that qualify them for micropolitan and metropolitan status. With counties as their building blocks, the core-based areas will include large amounts of farmland and other distinctly rural countryside.

The Office of Management and Budget is aware of these problems. It warns that the metropolitan and micropolitan standards “do not equate to an urban-rural classification” and that “counties contain both urban and rural population.” Accordingly, “OMB correctly urges agencies, organizations, and policymaker to review carefully the goals of nonstatistical programs and policies to ensure that appropriate geographic entities are used to determine eligibility for and the allocation of Federal funds” (p. 82229). Yet the practice of determining program eligibility on a county basis is well entrenched and likely to continue. Policy relevant economic and demographic data remain relatively scarce for geographic entities smaller than counties.

The U.S. Bureau of the Census has long championed another way of defining urban and rural. It defined as urban any settlement of 2,500 residents or more, and the rest of the nation as rural. Thus, the farmland is rural, and the town is urban, and there is no problem of combining both town and country within a county-size aggregate. This concept is in the urbanized areas and urban clusters of the new system. Both are built up from census block groups on a block by block basis, adding land that qualifies on the basis of population density.

Thus, land is rural unless it is densely settled. The only decision necessary is what size of urban settlement distinguishes urban from rural. If an urban area of 2,500 people is the dividing point, 59 million people or 21 percent of Americans today live in Rural America. If 10,000 separates urban and rural, 25 percent of the nation is rural. If 50,000 is the line, 32 percent or 89 million folks are rural. Draw the line at 500,000, and the nation is half urban and half rural.

Rural definitions and policy

The Farm Security and Rural Investment Act of 2002 incorporates several such choices in defining rural for policy purposes. According to the 2002 Farm Bill, “the terms ‘rural’ and ‘rural area’ mean any area other than (i) a city or town that has a population of greater than 50,000 inhabitants; and (ii) the urbanized area contiguous and adjacent to such a city or town.” For water and waste disposal grants, however, “the terms ‘rural’ and ‘rural area’ mean a city, town, or unincorporated area that has a population of no more than 10,000 inhabitants,” and for community facility loans and grants, rural means no more than 20,000 inhabitants. The rural business investment program depends on metropolitan status: Rural means “(i) outside a standard metropolitan statistical area; or (ii) within a community that has a population of 50,000 inhabitants or less.” Finally, for regional planning organizations and the National Rural Development Partnership, rural means “all the territory of a State that is not within the boundary of any standard metropolitan statistical area; and all territory within any standard metropolitan statistical area within a census tract having a population density of less than 20 persons per square mile, as determined by the Secretary according to the most recent census of the United States as of any date.”

Defining Rural America as everything except densely settled population centers has common sense appeal. As a help in making and implementing policy, however, it will fall short until our statistical system provides more data that distinguishes among the population centers, smaller settlements, and the surrounding countryside. In the meantime, we will continue to use readily available county data to try to understand rural conditions and monitor rural trends, and rural policy makers will continue to define rural on a case by case basis, trying to deal with the imperfect match between common sense realities and the statistical information system. ❖

2002 Farm Bill

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The 2002 Farm Bill, representing a collection of compromises between the House and Senate Bills, became law on May 13, 2002. It is a six-year bill entitled “Farm Security and Rural Investment Act of 2002.”

Below are a few highlights of the 2002 Bill’s Commodity Title and Conservation Title. The other titles of the omnibus bill are on trade, nutrition, credit, rural development, research, forestry, energy, and miscellaneous items.

Commodity title

In general, the commodity title offers the same type and level of income support that has been provided during the past four years by establishing (1) a loan rate program that increases the loan rates for corn and wheat while decreasing the rate for soybeans, (2) the continued use of fixed payments, and (3) a counter cyclical program that replaces the oilseed and Market Loss Assistance (MLA) payments.

Loan Rate Program. The national average loan rate for corn was increased from its current level of \$1.89 per bushel to \$1.98 for the 2002 and 2003 crops. The soybean rate was lowered from \$5.26 to \$5.00, while the wheat rate increased from \$2.58 to \$2.80. For 2004-07, the soybean rate remains at \$5.00 while the corn rate drops to \$1.95 and the wheat rate drops to \$2.75.

Inherent in the “safety net” feature of the loan program is the possibility of creating non-market price signals. In recognition of this, both the House and Senate Bills adjusted the relationship between the 1996 Farm Bill soybean and grain rates to more closely reflect the relative costs of production between the crops. The House Bill made this adjustment in relative rates by maintaining the corn rate at the 1996-2002 level and lowering the soybean rate by 34 cents per bushel. The Senate Bill’s adjustment was made by decreasing the soybean rate by six cents and increasing the corn rate by 19 cents. The resulting compromise between the two bills increased the corn

rate by nine cents per bushel for 2002-03 (six cents for 2004-07), while decreasing the soybean rate by 26 cents.

The relationship between market prices and loan rates during the last four years suggests that the relative adjustments made in the new farm bill are justified. (The absolute levels are more open for debate.) Some fundamental changes in worldwide commodity production affecting these relationships will be discussed in the Fall 2002 issue.

Counter Cyclical Program. The counter-cyclical (CC) program of the 2002 Bill, in effect, institutionalizes the MLA (second AMTA payment) and oilseed payments that have been made each fall since 1998. These payments have been based on program bushels, in response to low commodity prices. The new CC payments will also be based on program bushels when the national average price falls below levels specified in the 2002 Bill.

For the 2002 and 2003 crops, CC payments for corn will be triggered when the 12-month average price falls below \$2.32. For the 2004-07 crops, the price trigger increases by three cents per bushel (matching the three cent drop in loan rate) to \$2.35. For soybeans, the national average price below which CC payments are triggered is \$5.36. For wheat, it is \$3.34 for 2002-04 and \$3.40 for 2004-07. If the 12 month national average price is below the trigger price then the payment is equal to the difference between the trigger price and average price times program bushels. The maximum payment is the difference between the trigger price and loan rate times program bushels.

To determine program bushels for CC payments, producers have the option of either (1) keeping their current AMTA base acres and adding oilseed acres or (2) using the average 1998-2001 planted acres as the base. Payments are made on 85% of the base. If a producer updates base acres, he/she can either (1) keep the 1996 program yield (and establish the program soybean yield) or (2) update yields with either one of two formulas. Gary Schnitkey and Dale Lattz provide more detail on the updating options in the following article, and offer a spreadsheet program to help Illinois producers make those decisions.

Like the loan program, the general purpose of the CC program is to provide an income “safety net”

to producers. However, an important difference between the loan and CC programs is that the loan rate applies to current production, while the CC rate applies to a fixed quantity determined on the basis of past production. This quantity is independent of what is produced during 2002-2007. Consequently, the primary “pricing signal” that faces the producer is provided by the market price and the loan rate. Since the CC trigger price does not apply to what is produced, its effect on production decisions is through an “insurance effect” that is triggered by price.

Direct Payment Program. Fixed payments, like the AMTA payments of the 1996 Farm Bill, are made on traditional program crops, plus soybeans. Program yields for direct payments are those that have been used for AMTA payments in conjunction with the establishment of program yields for soybeans. The direct payment rate is 28 cents per bushel for corn; 44 cents for soybeans; and 52 cents for wheat.

The income support provided through direct payments does not vary depending on price, income, or other economic variables. Thus it is difficult to find “safety net” features in such a program unless it is in a long term context where the government is providing support during the current (and presumably short term) period of low prices. However, even in this context, fixed payments are reflected in land rents, reducing if not eliminating any increase in the expected profit per rented acre caused by the payment. The impact of such payments, then, depends largely on the farmer’s tenure (land ownership) situation.

Income Support Level to Illinois Producers.

The 2002 Farm Bill generally increases the level of income support that has been provided during the past three years to Illinois corn and soybean producers. Under “typical” scenarios where recent support has been \$60 to \$80 per acre, it is estimated that the new bill would provide about \$10 to \$15 more per acre.

Payment Caps. Limits per individual producer are \$40,000 for direct payments; \$65,000 for counter-cyclical payments; and \$75,000 for LDP’s and MLG’s. The total limit of \$180,000 is effectively increased twofold to \$360,000 through the 3-entity rule, and because there is no limit on the use generic certificates (allowing unlimited LDP and MLG payments)

\$360,000 is not an effective cap.

Other Provisions. A few of the other features of the commodity title include:

1. A new 42 month “target price” program for milk in addition to the current price support program. Payments are capped on production beyond that which is typically produced by about 140 cows.
2. A peanut production quota buyout over five years is established, and a target price program and loan rate program are introduced.
3. Marketing loan programs are established for wool/mohair and for honey. Support programs for these commodities were dropped in 1996.
4. New marketing loan programs were established for small chickpeas, lentils, and dry peas.

Conservation title

Baseline expenditures for the Farm Bill are expressed in terms of a 10 year budget, even though it is a six year bill. The total baseline expenditure for conservation programs — mostly for the Conservation Reserve Program (CRP) — over 10 years is \$21.5 billion. The 2002 Farm Bill provides for a \$17.1 billion increase over this baseline. This increase is close to that proposed by the House (\$17.5 billion) but less than the Senate’s proposed increase of \$22.5 billion. These ten-year expenditure estimates, however, do not reveal the annual outlays that are not necessarily (indeed rarely) equal across years.

A 10-year cost of \$9 billion is budgeted for the Environmental Quality Incentives Program (EQIP). Introduced in the 1996 Farm Bill, EQIP has assisted farmers in meeting environmental laws, particularly those associated with livestock waste management. The 2002 Bill allocates 60% of the EQIP funding to livestock practices and 40% to practices related to crops. A producer can receive no more than \$450,000 of EQIP funding over the life of the Farm Bill.

The crop security program (CSP), authored by Senator Harkin, is a new incentives program aimed at conservation practices on working lands. Expenditures for the CSP are intended to be at \$2 billion or

more, depending on participation. The CSP offers three tiers of conservation contracts providing different levels of assistance, depending on whether the producer is using basic management practices, practices that address additional priority resource concerns, or practices that address all resource concerns of the operation. Annual maximum payments for the three tiers are \$20,000, \$35,000, and \$45,000.

A wide variety of practices are identified for the CSP program, although it is not clear at this point what types of conservation plans will actually be approved and accepted. It is clear, however, that Illinois producers should play close attention to the opportunities offered by this program because of its focus on “working lands.”

Some other highlights of the of the Conservation Title include: (1) an increase of the CRP cap from 36.4 million acres to 39.2, and an increase in the Wetland Reserve Program cap from 975,000 acres to 2.275 million acres; (2) relatively large increases in funding for the Farmland Protection Program and the Wildlife Habitat Incentives Program; and (3) the introduction of a Grasslands Reserve Program that can enroll up to 2 million acres of pastureland.

Summary

In sum, the commodity title of the Farm Security and Rural Investment Act of 2002 provides the same type and level of support to Illinois crop producers as that which has been provided since 1998. It does so by maintaining the loan-rate and AMTA programs, coupled with rules that determine when the second AMTA payments are made.

In contrast, the conservation title represents a significant increase in public assistance for conservation and environmental practices by increasing support for current programs and by introducing new programs. Illinois producers of both livestock and crops should pay particular attention to potential opportunities offered by the Conservation Security Program and the Environmental Quality Incentives Program. ❖

Updating Acres and Yields for the 2002 Farm Bill

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Under the 2002 Farm Bill, direct (formerly AMTA) and counter cyclical (CC) payments will be made on the 2002–2007 crops. For each participating farm as defined and identified by FSA, both types of payments will be based on a fixed number of “program bushels,” determined and fixed now for the entire 2002–2007 period. To set the program bushels, producers or land owners must make decisions about how base acres and program yields are determined. “Program crops” include the traditional program crops plus new program crops such as soybeans.

In simplest terms, farmers first choose whether they want to “update” base acres, and if they choose to do so, they then pick among alternative methods by which yields for the CC program are determined. The choices are summarized in Table 1.

Updating acres

No Update Option. A farmer can choose not to update base acres by retaining the base acres used to calculate AMTA payments under the 1996 Farm Bill. These acres, referred to here as AMTA acres, exist only for program crops under the 1996 Farm Bill (e.g., corn, wheat, and oats). Soybeans and other oilseeds do not have base acres under the 1996 Farm Bill but are established under the “no update” option by using the average number of soybean acres planted or prevented planted from 1998 through 2001, as long as adding these base acres for soybeans does not result in a higher number of total program acres than were grown in 1998 through 2001. When total AMTA acres plus soybean base acres exceed total program acres, base acres for one or more crops must be reduced to stay within the total program acre limit.

Adding base acres is illustrated here with farm acres and yields shown in Table 2. From 1998 through 2001, this example farm averaged 50 acres of corn and 50 acres of soybeans, meaning that it has 100 eligible program crop acres. The farm is eligible

for up to 100 base acres for corn and soybeans.

Under the no-update option, this farm's new base acres depend on the farm's current AMTA acres. It is assumed here that the AMTA acres are just corn (no AMTA wheat, for example). If the farm has 40 AMTA corn acres, then the new program acres (without updating) will be comprised of 40 corn base acres and 50 soybean base acres. If the farm has 50 AMTA corn acres, then the new program acres will be 50 corn and 50 soybeans. However, if the farm has 60 AMTA corn acres, then adding these 60 AMTA corn acres to the 50 average soybean acres gives 110 total acres, exceeding the 100 acre maximum for program crops. In this case the farm must reduce base acres by 10 to stay within the 100 acre total for program crops by either: (1) reducing corn acres by 10, (2) reducing soybean acres by 10, or (3) reducing both corn and soybeans by some combination that adds up to 10. Because corn acres usually have higher government payments than soybean acres, it is likely that the farmer would choose 60 base acres for corn and 40 acres for soybeans.

Update Option. Under updating, base acres equal average acres planted and prevented planted for the years between 1998 through 2001. For example, the farm shown in Table 2 plants 60 acres of corn and 40 acres of soybeans or vice versa each year. Average acres for both corn and soybeans over the four years equal 50 acres. Therefore, this farm will have 50 base acres of corn and 50 acres of soybeans if acres are updated.

Updating yields

The acreage updating choice impacts choices available for updating yields. If acres are not updated, no yield choice is available. Both direct payments and CC payments will be based on program yields (defined below). If acres are updated, then direct payments still will be based on AMTA yields; however, there will be three options for specifying yields for CC payments. If acres are updated, then CC payments can be based on: (1) AMTA yields, (2) updated yields using the "70% difference" method, and (3) updated yields using a "93.5%" method. A farmer must use only one of these updating methods for all crops on the farm.

AMTA yields. AMTA yields for corn, wheat, and oats (i.e., any program crop under the 1996 Farm Bill) will equal the yields used to calculate AMTA payments under the 1996 Farm Bill. The 1996 Farm Bill did not include yields for soybeans and other oilseed crops; therefore, these yields must be calculated. Yield for soybeans equals the average of soybean yields from 1998 through 2001 times .7814, which equals the ratio of national soybean yields from 1981 through 1985 to national yields from 1998 through 2001. This adjustment keeps soybean yield on a comparable basis with corn and wheat yields. If a farm yield from 1998 through 2001 is below 75% of the county yield, the farm yield can be replaced by 75% of the county yield.

For the example farm in Table 2, each year's yield is above 75 percent of the county average; therefore,

Table 1. Updating Acres and Yield Choices under the 2002 Farm Bill

Acres/Yield Choices	Base Acres	Yields for Direct Payments	Yields for Counter-Cyclical Payments
1. Do not update acres	Current AMTA acres plus soybean acres	AMTA and soybean yields	AMTA and soybean yields
2. Update acres			
A. Do not update yields	Based on average acres planted and prevented planted from 1998 through 2001	AMTA and soybean yields	AMTA and soybean yields
B. Use "70% Difference" method to update yields		AMTA and soybean yields	Updated yields "70% Difference"
C. Use "93.5" method to update yields		AMTA and soybean yields	Updated yields

all four yields are used in calculating the average yield. The average yield of soybeans from 1998 through 2001 is 49 bushels, thus the farm’s soybean program yield is 38 (49 bu. x .7814).

Updating yields using the “70% Difference” method: Under this method, the updated yield is the AMTA yield plus 70% of the difference between the average yield from 1998 through 2001 and the AMTA yield. When a farm has a yield below 75% of the county yield, 75% of the county yield will replace the farm yield in calculating the average yield from 1998 through 2001. The soybean yields in Table 2 result in a no-update yield of 38 bu. and an average yield from 1998 through 2001 of 49 bu. Under the 70% difference method, this farm will have an updated yield of 46 bu; that is, $38 \text{ bu.} + .7 \times (49 - 38)$. The updated corn yield is calculated in the same manner; that is, $\text{AMTA yield} + .7 \times (156 - \text{AMTA yield})$.

Updating yields using the “93.5%” method: Under this method, the updated yield equals 93.5% of the average yield from 1998 through 2001. When calculating the average yield from 1998 through 2001, the 2002 Farm Bill allows a farm yield for a given year to be replaced by 75% of the county average yield when 75% of the county yield is greater than the farm yield. For the farm shown in Table 2, the 93.5% method results in an updated yield of 46 bu. ($49 \text{ bu. average yield} \times .935$) for soybeans and 146 for corn.

So what’s the best choice?

A general tradeoff facing many farmers in Illinois is whether the increased CC payments from updating yields outweighs the decreased payments from losing corn base acres. The direct payment rate for corn is 28 cents per bushel and the maximum CC payment is 34 cents (which changes slightly for the 2004–07 crops). For soybeans, the direct rate is 44 cents and the full CC rate is 36 cents. Thus, for a typical yield situation, direct and full CC payments for a corn base acre are larger than the direct and full CC payments for a soybean base acre. During the past few years, there has been a general shift in planted acres toward soybeans. Thus, some farmers may find that the best option is not to update acres and yields because in doing so they give up a relatively large share of corn base acres.

To illustrate the tradeoffs, summary data from Illinois Farm Business Farm Management (FBFM) Association records for northern, central and southern Illinois grain farms were gathered. A region is represented the FBFM farms in one county within that region. Calculations for the farms’ payments are based on three CC scenarios — full CC payment (occurs when the average market price is at or below the loan rate), one-half CC payment, and no CC payment. The payments under each updating decision, region, and CC scenario are reported Table 3, with the highest payment under each scenario and region in bold.

As the results illustrate, the updating option that yields the maximum payments can vary depending on

Table 2. Acres and Yields for an Example Farm

Year	Acres		Yields ¹	
	Corn	Soybeans	Corn	Soybeans
1998	60	40	149	48
1999	40	60	161	50
2000	60	40	155	47
2001	40	60	158	49
Average	50	50	156	49

¹Yields are average county yields for McLean County.

the farm's situation. For northern Illinois grain farms, using the current base acres and yields resulted in the maximum payment for all levels of counter-cyclical payments. This outcome is because these farms would have their corn base reduced too much to make up for the increase in yield base.

For central Illinois grain farms, updating acres and using the 93.5% alternative for updating yields was the best choice with counter-cyclical payments at the fifty percent or maximum level. However, with no counter-cyclical payments, not updating base acres and yields was the best choice because direct payments still use the current program yield and updating acres resulted in fewer corn base acres.

The highest payment for southern Illinois farms was from updating acres and using the 93.5% yield alternative for updating yields. On average, these farms added corn base acres when updating and also improved their corn base yield.

While Table 3 illustrates why different decisions about updating might be made, it also provides a sense of the cost of making a "bad" decision. In most cases, but not all, that cost is not high because the difference in payments between two options is often small. Nonetheless, producers are well advised to "run the numbers" for each farm. Help with that process can be found in the policy section of the University of Illinois *farmdoc* website: www.farmdoc.uiuc.edu ❖

Table 3. Estimated Direct and Counter-Cyclical Payments Under the 2002 Farm Bill for Different Base Acre and Yield Alternatives

	Northern Illinois	Central Illinois	Southern Illinois
Direct and counter-cyclical with maximum counter-cyclical payments			
	----- \$ per acre -----		
Current base acres and yields	\$54.90	\$48.30	\$33.34
Updated acres, current program yields	49.23	46.33	33.57
Updated acres, 70% diff. yields	53.52	51.43	38.23
Updated acres, 93.5% yields	53.20	51.58	38.68
Direct and counter-cyclical with 50 % of maximum counter-cyclical payments			
	----- \$ per acre -----		
Current base acres and yields	\$40.25	\$35.64	\$24.88
Updated acres, current program yields	36.31	34.28	25.03
Updated acres, 70% diff. yields	38.45	36.83	27.37
Updated acres, 93.5% yields	38.30	36.90	27.59
Direct with no counter-cyclical payments			
	----- \$ per acre -----		
Current base acres and yields	\$25.61	\$22.98	\$16.41
Updated acres, current program yields	23.39	22.22	16.50
Updated acres, 70% diff. yields	23.39	22.22	16.50
Updated acres, 93.5% yields	23.39	22.22	16.50

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ILLINOIS RURAL POLICY DIGEST

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