

Grounds for Confusion

Iowa's Distorted Assessment of Farm Property

Beth Pearson and Peter S. Fisher

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Iowa Fiscal Partnership

The Iowa Fiscal Partnership is a joint initiative of the Iowa Policy Project and the Child & Family Policy Center, two nonprofit, nonpartisan Iowa-based organizations that cooperate in analysis of tax policy and budget issues facing Iowans. IFP reports are available on the web at <http://www.iowafiscal.org>.

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Introduction

Iowa's agricultural property assessment and tax system has not evolved in relation to major historical shifts in agricultural production. Over the past several decades, agricultural production in Iowa has become more specialized, consolidated and commercial. These processes have resulted in significant changes for patterns of agricultural land and building use but not for our tax structure. As a result, the current system contains numerous distortions that inhibit the fair and accurate assessment of the value of agricultural property such that both agricultural land and buildings are taxed far below their market value. While there is some justification for taxable value differing from market value if and when market conditions are not an accurate indication of the productive value of a piece of agricultural property, this is often not the case in Iowa. Rather, an outdated tie between land and buildings leads to the assessment and taxation of industrial agriculture buildings such as concentrated animal feeding operations (CAFOs) as if they were cropland. This tie combines with several features of the complicated formula used to evaluate farmland productivity to create an assessment system that is neither straightforward nor fair.

This report begins with a discussion of the property assessment process in Iowa, focusing on agricultural property and highlighting the important distinctions between the "market," "assessed" and "taxable" value of a piece of property. This section also explains how the value of agricultural property is determined through a productivity formula that treats agricultural buildings as if they are identical to agricultural land, lowering their taxable value while distorting the assessment of land within a county.

The report then moves to an analysis of Department of Revenue rules issued in 2005 and 2007 which were designed to address one particular problem of agricultural building assessment in Iowa, namely the inter-county disparity in agricultural building values caused by local assessor autonomy and systemic constraints on the accurate valuation of buildings. These rule changes mandated that assessors apply an "agricultural factor" to the replacement cost of agricultural buildings. The factor is a ratio that — like the productivity formula — is based on the value of agricultural land; its application means that agricultural buildings in Iowa are assessed at between 17 percent and 32 percent of their market value. For some counties, this rule change meant a significant shift in assessed value from buildings to land, while other counties saw their building assessments rise in relation to the assessed value of land.

Although the Department's rule changes addressed a troubling feature of the current agricultural assessment system, the fundamental problems contributing to inter-county disparity and the broader distortions of an outdated system can be corrected only through legislation. The closing section of this report offers policy recommendations that would enhance the fairness, stability, simplicity and accuracy of Iowa's agricultural property assessment process. We recommend that agricultural land and buildings be assessed and taxed as two, separate types of agricultural property. In addition, we argue that value of

agricultural buildings should be assessed with reference to market value rather than through the productivity formula, which is not designed to evaluate livestock income. Finally, we also make recommendations for changes to the productivity formula that allow it to more accurately assess farmland and suggest that the assessment of agricultural land could be greatly improved and simplified if the productivity formula were replaced by the use of the cash rent survey to determine the value of land in farming uses. These changes would significantly increase the capacity of Iowa's agricultural property assessment system to accurately measure the value of agricultural land and buildings while ensuring that this system is also fair and simple.

How Does Property Assessment Work?

Property in Iowa is assessed locally by either county or city assessors, who are charged with classifying property located in their jurisdictions as agricultural, residential, commercial or industrial property. The starting point for the assessment of all taxable property in Iowa is "actual value." For most classes of property "actual value" means the price a property could command in the market, or "market value." In order to determine the market value of a piece of property, an assessor may employ the "comparable sales" approach, examining actual prices of similar pieces of property that have been sold recently. Also considered are other factors related to market conditions, such as the availability of potential buyers. Where sales of comparable properties are not appropriate — as is the case for most commercial and industrial property — actual value is determined either by capitalizing the net rental income from the property or by estimating the replacement cost and then allowing for depreciation.¹

Property owners in Iowa do not pay taxes on actual value, however. Instead, actual value is multiplied by something called a "rollback": a fraction equal to or less than one. The result of this calculation is "taxable value" and this is the basis for computing taxes. The rollback was devised as a way to prevent a dramatic shift in property tax onto homeowners due to rapid increases in housing prices. The rollback on each class of property is designed so that the taxable value of that class of property statewide grows no more than 4 percent each year. For example, if the residential rollback were set at .80, then taxable value would be just 80 percent of actual value for that year. If actual residential values rose by, say, 6 percent the next year, the rollback would have to be lowered to less than .80 to keep taxable value from growing more than 4 percent. The tax due is then calculated by multiplying taxable value by the tax rate. (See Appendix I for a more detailed explanation of how the rollback works.)

In another effort to contain growth in the taxable value of residential property, the assessment of residential and agricultural property is tied together. The tie means that the annual increase in taxable values for residential and agricultural property is limited to the smaller of the two increases in either class of property. In years when farmland assessed values are rising slowly, the residential rollback is lowered further such that the statewide growth in taxable residential value is less than 4 percent, to match the growth in agricultural taxable value.

The rollback and the tie between agricultural and residential property values both highlight the important distinction between *assessed* and *taxable* value. Assessed value is the value of a piece of property according to its actual or market-determined value. But, because of the rollback or the tie between agricultural and residential property values, the entire assessed value of a property may not be subject to taxation. The rollback applied to residential property has been less than one every year since its first application in 1978, meaning that taxable values since 1978 have been less than actual or market value. The rollback level for a given year depends on relative changes in the assessed values of residential and

¹ Capitalizing refers to the process of converting a stream of annual net rents (rent less operating, maintenance and other costs) to the lump sum or present value equivalent of that stream. The value of rental property, in other words, is determined by the net income that it will generate in the future.

agricultural property. The residential rollback was about 80 percent in the late 1980s but since then has fallen dramatically; it has been below 50 percent since fiscal year 2004-05.²

For assessment year 2007, the rollback percentage for residential property was 44.1 percent (meaning that residential property is taxed on 44.1 percent of its assessed value), while the rollback percentage for commercial and industrial property was almost 100 percent (meaning that there was basically no decrease in its assessed value). Increased crop prices and yields in 2005 — the most recent year incorporated into the five-year rolling average used to calculate productivity value — led to higher assessed values of agricultural property in 2007 and the first application of the rollback to agricultural property since 1999. A rollback factor of 90 percent was applied in 2007, meaning that the taxable value of agricultural property was 90 percent of its assessed value.

Assessing Agricultural Property in Iowa

The “actual value” of agricultural property is determined somewhat differently from that of other classes of property. The actual value of agricultural property is defined as its “productivity” value. Productivity value is meant to approximate the value of the land based on its recent past capacity to generate net farm income. The agricultural assessment process begins with the calculation of the productivity value of all agricultural land in the county. Productivity value is determined through a formula that uses data on the yield and prices for corn and silage, soybeans, wheat, oats and hay, along with the costs of agricultural production, to come up with a figure for net annual farm income per acre. Each county bases its calculations on the mix of crops actually grown in that county, so a county that grows more hay will have a productivity value based more on the lower profitability of hay compared to corn. Annual farm income is then converted to productivity value by capitalizing the income at 7 percent (which in the case of land involves simply dividing net income by 0.07).

Since the productivity formula requires historical data on crop production and costs, and since property is reassessed only in odd-numbered years, there is a two- or three-year lag between changes in farm prices and changes in land value. The formula uses a five-year average of previous years’ values in order to arrive at the productivity value for a given assessment year. For example, productivity values for the 2006 assessment year (which determine taxes paid in fiscal year 2007-08) are based on the five-year average of productivity values for 1999-2003. Values for assessment year 2007 and 2008 are based on data from 2001-05. Thus, productivity values will not begin to reflect 2007’s much higher corn prices until the 2009 assessment year, and even then the effect of the increase will be diluted because of the lower values for 2003-06 that remain in the formula.

In order to estimate the actual value of farm buildings, a local assessor estimates a building’s replacement cost and then subtracts depreciation, based on the building’s age and expected life. This method is sometimes referred to as RCNLD (replacement cost new less depreciation) and is commonly applied to commercial and industrial facilities. For such properties, replacement cost is assessed value, and assessed value is usually also taxable value, the rollback for commercial and industrial historically being 1.00 most years. (That is, assessed value is not reduced at all to arrive at taxable value).

However, a peculiar and problematic feature of agricultural property assessment in Iowa is that building assessments are intimately tied to land assessments and therefore often differ greatly from replacement

² The rollback can increase, if the rise in actual value in a given year is less than 4 percent. This is because the rollback law, while intended to put a 4 percent ceiling on growth in taxable value, also puts a 4 percent floor on that growth. That is, the rollback is calculated to ensure that taxable value grows at exactly 4 percent regardless of the growth in actual value. The rollback in fact did rise during most of the 1980s when Iowa was in a prolonged economic slump and property values were growing slowly.

cost. The total value of all agricultural property in a county — farmland and farm buildings — is determined without regard to the value of the buildings.³ It is simply equal to the productivity value of the land, as determined by the productivity formula. This total is then divided between land and buildings. This means that, regardless of the assessed value of buildings, the total assessed value of land and buildings combined remains fixed at a value based solely on the productivity of cropland. This creates a “closed system” in which any change in the assessed value of agricultural buildings results in an equal and opposite change in the assessed value of agricultural land.

Additionally, in 2005, the Department of Revenue adopted an agricultural factor rule for buildings. The “agricultural factor” is the ratio of the productivity value of land to the market value of land in each county.⁴ So, for instance, if a county had an average productivity value of \$750 per acre and an average market value of land of \$3,000 per acre, the agricultural factor for that county would be 25 percent (\$750/\$3,000). The 2005 rule meant, therefore, that farm buildings in a county with a 25 percent agricultural factor would be assessed at 25 percent of depreciated replacement cost.

The assessed value of the buildings is then subtracted from the total county assessed value for agricultural property to arrive at the total assessed value for land. The more of the total value that is taken up by the value of buildings, the less of the total that is taken up by land value. The end result of this approach is the taxation of agricultural land at *less* than its productivity value, because a portion of the total productivity value was assigned to buildings.

The assessed value of a given parcel of land is determined by apportioning the total county assessed land value (the amount that remains after some of the overall county total is assigned to agricultural buildings) among land parcels in the county. This apportionment is based on each parcel’s corn suitability rating (CSR), which is a measure of its potential to grow crops based on slope and soil type. Better farmland will have a higher assessed value per acre. Note that the assessed value of a parcel does not depend upon how that particular parcel is actually used, but rather on its potential to generate farm income if it were used in a way typical for that county in recent years.

As Table 1 shows, the assessed value of agricultural buildings currently accounts for a relatively small share of the state’s total assessed value of agricultural property.⁵

Table 1. Buildings Relatively Small Share of Total Assessed Agricultural Property Value in Iowa

	2006	Percent	2007	Percent
Total assessed value	\$ 21,898,245,556	100	\$25,412,100,928	100
Land	\$ 18,901,160,943	86	\$22,316,083,257	88
Buildings	\$ 2,997,084,613	14	\$3,096,017,671	12

In addition to being affected by how many agricultural buildings exist within the county, the allocation of a county’s total assessed value among buildings and land is guided by each county assessor’s own assessment philosophy and set of assessment practices. As a result, there has been wide variance in how assessors assess similar agricultural buildings across counties and in the share of a county’s total assessed agricultural property value allocated to buildings. The Department of Revenue reported in 2007

³ Farm dwellings are assessed separately as residential property.

⁴ Market value of farmland is determined by examining recent farmer-to-farmer sales in the county. Land sales on the urban fringe, where farmland can have a much higher speculative value based on its development potential, are ignored.

⁵ All data used in this analysis comes from the Iowa Department of Revenue. See in particular Department of Revenue (2007) “Iowa Farm Building Assessments.” Presentation to Legislative Property Tax Study Committee, December 7, 2007.

Available from: <http://www.iowa.gov/tax/locgov/proptax120707.pdf>.

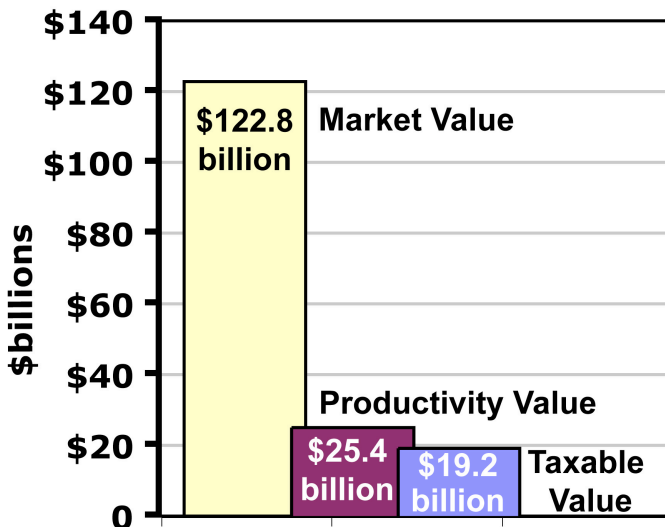
that a recent survey of county assessment practices for three specific types of agricultural buildings (metal pole barn, grain bin and hog finishing building) revealed a significant disparity across counties. For example, the minimum county assessment for a hypothetical hog-finishing building reported from the survey was \$41,900, while the maximum was \$384,000. In 2006, building assessments as a share of a county’s total assessed value ranged from 3 percent in Adair County to 27 percent in Dubuque County.

This disparity is due to a number of factors, many related to the fact that county assessors in Iowa have a high degree of autonomy in determining how building values are assessed. Implementation of the Department’s 2005 agricultural factor rule has been uneven. In addition, the use in some counties of outdated pricing manuals to calculate the replacement costs of buildings, as well as varying levels of assessment experience, contributes to variations in building assessments across Iowa counties.

Another important factor causing assessment disparities is that assessors have no incentive to revalue agricultural buildings since increases in building value do not affect a county’s total assessed value of agricultural property. Because the total assessed value of a county’s agricultural property is determined by the number of acres in each county and the productivity formula (as well as state equalization orders that ensure some uniformity across counties in the calculation of total county productivity value of land), the construction of new agricultural buildings or improvement of existing buildings does not add to the overall value of agricultural property in the state or county. Instead, the “closed” nature of the agricultural property system means that, once a county’s total value has been calculated, increases in the value of agricultural buildings due to new or improved construction only decrease the value of agricultural land as the overall value of agricultural property remains based on the productivity formula.

Figures 1 and 2 below show the result of the assessment process as a comparison of the taxable value of agricultural land and buildings in Iowa and the market or replacement costs of these kinds of property.

**Figure 1. Taxable Value of Land
About 1/6 of Market Value**



**Figure 2. Taxable Value of Ag Buildings
About 1/5 of Market Value**

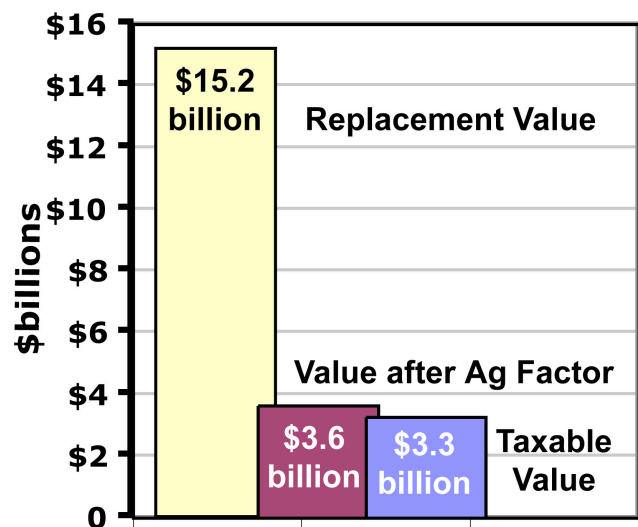


Figure 1 shows the aggregate market value of farmland in Iowa is approximately \$122.8 billion. By comparison, using five-year averages of the inputs in the productivity formula, the calculated productivity value of this farmland is only \$25.4 billion. Some factors that cause the productivity value to differ substantially from the market value of land are discussed in greater detail below. Because, as discussed above, this productivity value establishes the *combined* value of both land and buildings, the

taxable value of farmland is further reduced by the entire value of agricultural buildings, which is \$3.3 billion. In addition, the taxable value of farmland is affected by the rollback, which in 2007 reduced the taxable value of farmland by approximately \$2.2 billion. The combined effect of the rollback and assigning a portion of the aggregate productivity value to buildings is to reduce the productivity value of Iowa farmland by \$5.8 billion, to \$19.6 billion of taxable value, or 16 percent of its market value.

Figure 2 shows the same set of relationships for the value of agricultural buildings in Iowa. The aggregate market value of buildings⁶ is estimated at \$15.2 billion. Some of this value is tax exempt because of the pollution control exemption, which has a total statewide value of approximately \$220 million.⁷ Additionally, the application of the agricultural factor reduces the replacement value of buildings to \$3.6 billion. The rollback further reduces this value by just over \$306 million such that the aggregate taxable value of Iowa farm buildings is approximately \$3.3 billion, or 22 percent of their market value.

Efforts to Address Disparity in Agricultural Building Assessments

The significant disparities across counties in the assessed values of similar agricultural buildings meant that agricultural building owners were paying sharply different levels of property taxes in different parts of the state. Assessment disparities among properties within the same class, particularly with regard to agricultural property, have been a persistent concern in Iowa.⁸ In 2007, the Department of Revenue acted to address this disparity by strengthening the existing agricultural factor rule and stating that all farm buildings should be treated uniformly with the application of the agricultural factor. The rule took effect for the first time for agricultural assessed values as of January 1, 2007. The Department of Revenue calculated the agricultural factor for each county and issued the result as a guide for each county's assessor. Agricultural factors vary from county to county, depending on the productivity of each county's land and on the market value of land. Factors ranged from a high of 32.4 percent (Chickasaw County) to a low of 17.1 percent (Warren County and Monroe County), with an average factor of 24.3 percent.⁹

Again, because of the "closed system" nature of the assessment of agricultural property, in which the county's total assessed value is calculated and then apportioned among land and buildings, any shift in the assessed value of agricultural buildings will result in an equivalent and opposite shift in the assessed value of agricultural land. So, if the application of the agricultural factor to buildings in one county means that the aggregate assessed value of these buildings goes down relative to its historic assessed value, then the aggregate assessed value of agricultural land in that same county will have to go up in order to leave the total unchanged.

As illustrated by the Department of Revenue's survey of the assessed values of agricultural buildings across Iowa counties, some counties were previously assessing agricultural buildings at rates far higher than either the statewide average factor of 24.3 or the factor proposed to them by the Department of

⁶ Market value in this case refers to the replacement cost of a building, less depreciation.

⁷ Iowa Code § 427.1(19) defines a "pollution control property" as property "used primarily to control or abate pollution of any air or water of this state or used primarily to enhance the quality of any air or water of this state." In order to obtain a pollution control exemption, a property owner must submit a certificate of qualification from the Iowa Department of Natural Resources. Pollution control exemptions for agricultural buildings usually apply to the manure pits built by hog confinements to store concentrated waste.

⁸ Murray, William Gordon (1954) *Improving Property Assessments in the Midwest: A Preliminary Report*. Ames, Iowa: Agricultural Annex.

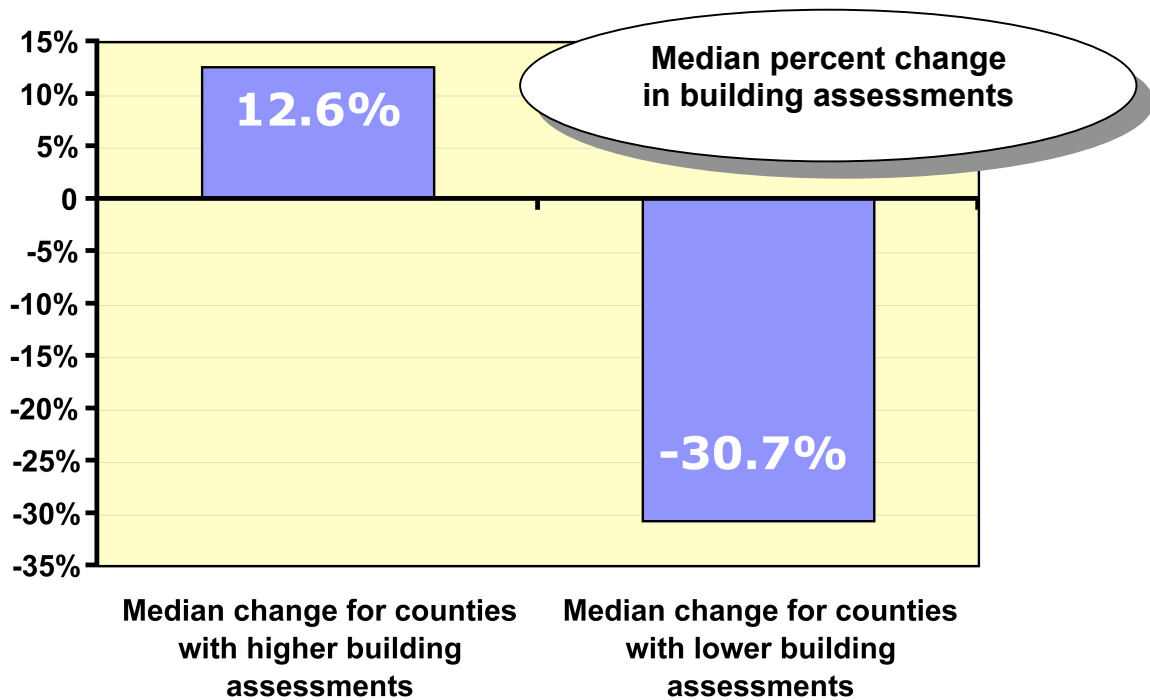
⁹ "2007 Agriculture Building Factor" map, Preliminary 2007 Agricultural Productivity Values, Iowa Department of Revenue, March 12, 2007.

Revenue, while other counties were assessing agricultural buildings at rates even lower than the suggested factor. The biggest impact of this rule change will therefore be felt in counties that had previously been assessing buildings at levels much different from the newly proposed factor, particularly if buildings had constituted a somewhat substantial share of the county's total assessed value.

Rule Impacts Greatest for Counties With Decrease in Building Assessment

Overall, only 25 counties saw a drop in building assessments from 2006 to 2007, while 74 counties saw at least a slight increase in building assessments. It is difficult to conclude precisely what proportion of these changes is due to the Department's rule change, particularly because the rule had most likely not been fully implemented when 2007 data was collected and because the Department has not yet strictly enforced the rule's application. The size of the adjustment made by counties experiencing drops in building assessments has been more dramatic than for those counties that saw building assessments increase. While counties where building assessments increased between 2006 and 2007 experienced a median increase in assessed value of 13 percent, those counties where building assessments decreased saw a median decrease of 31 percent. The average amount of increase for counties with higher building assessments was 16 percent, while those counties decreasing their building assessments averaged a decrease of 29 percent.

Figure 3. Counties Decreasing Building Assessments Experience Greater Change



Between 2006 and 2007, 15 Iowa counties saw their building assessments drop at least 20 percent following the Department's instructions regarding the application of the agricultural factor rule. Sixty percent of the counties that experienced a drop in building assessments had changes of greater than 20 percent in their building assessments, compared to only 34 percent of counties with increases in their building assessments experiencing that magnitude of change. Seven of the counties where building assessments dropped, or almost one-third of those experiencing lower building assessments in 2007, had building assessments that dropped at least 50 percent.

As shown in Table 1, buildings' share of the total assessed value of agricultural property went from 14 percent in 2006 to 12 percent in 2007. The decrease in buildings' share of total assessed value is due to the fact that almost all of the overall increase in total assessed value between 2006 and 2007 is attributable to increases in the value of land.

Table 2. Increase in Building Valuations a Small Share of Overall Increase

	2006	2007	Change 2006-2007	Percent increase	Percent of total increase
Total assessed value	\$21,898,245,556	\$25,412,100,928	\$3,513,855,372	16	100
Land	\$18,901,160,943	\$22,316,083,257	\$3,414,922,314	18	97
Buildings	\$2,997,084,613	\$3,096,017,671	\$98,933,058	3	3

Table 2 shows that the statewide assessed value of agricultural property increased by 16 percent between 2006 and 2007. This increase resulted in the first rollback for agricultural property since 1999. The table also shows that only 3 percent of the total increase in statewide assessed agricultural value was applied to buildings, compared to 97 percent of that increase taking place on the assessed value of land.

The application of such a small share of the overall increase in agricultural property value to buildings was a result of counties coming into compliance with the Department's rule change, which resulted in substantially lower building assessments in many counties. Because of the tie between land and buildings, a smaller share of annual increases in agricultural property value being applied to buildings means that a larger share is applied to land, meaning in turn that land owners have experienced an increase in their agricultural property assessments. Even with this increase, 2007 land assessments are still below productivity value because some of this value is assigned to buildings. Productivity value itself is below *current* capitalized farm income because the effect of higher crop prices in the past two years has not yet been reflected in the five-year rolling average.

An Outdated System for Agricultural Property Assessment

The Iowa Department of Revenue adopted the rule change requiring the application of the agricultural factor to the assessment of agricultural buildings largely because of obvious disparities in how buildings were being assessed across different Iowa counties. These disparities can largely be traced to underlying features of the agricultural property assessment system, which has not evolved in response to major structural shifts in Iowa's agricultural sector.

Historically, there was little need to separately assess agricultural buildings because buildings accounted for a small and consistent share of each agricultural property owner's overall property value. In fact, it made sense to simplify the assessment process by using the productivity formula as a way of determining the value of all agricultural property in the state. Over the past 20 to 30 years, however, agricultural production has become increasingly concentrated and specialized. These changes have had consequences for patterns of building ownership since concentrated livestock operations require large buildings but little land in comparison to property owners who have specialized in crop production. In other words, the past several decades in Iowa have seen a shift from a situation in which most agricultural property owners in Iowa had similar profiles in terms of the size and types of their production operations, to one in which agricultural property owners differ substantially in the size and type of their more specialized operations and hence their investment in land vs. buildings.

This shift means, among other things, that the productivity formula is no longer an accurate measure of property value for all types of agricultural production. Valuing agricultural land according to productivity potential rather than by a market standard is designed to protect farmers from rising property values or fluctuations in crop yields and prices that may substantially affect farm income. The justification for this system rests on the argument that market conditions cannot provide an accurate guide to the income capacity of a piece of farmland.

Using the productivity formula to achieve uniformity in county assessments of agricultural buildings therefore makes little sense when the market value of agricultural buildings has little to do with the variables that make up the calculated productivity value. The productivity formula is built on a set of inputs and prices that exclusively measure the profitability of producing crops on agricultural land and have, at best, an indirect and uncertain relationship to the value of livestock operations that now rely heavily on the use of buildings rather than land.

Higher demand for ethanol has helped to drive up the price of corn, which over time will drive up the productivity value of land. On the other hand, these higher corn prices represent higher costs of feed for owners of concentrated animal feeding operations (CAFOs), which at some point lowers the current profitability and hence possibly the market value of their facilities (if these higher prices are expected to persist). But the current formula could produce either a higher or lower taxable value for CAFOs as a result of these price changes. If productivity value rises more than market value of land, the agricultural factor will rise; if productivity value rises less than market value, the agricultural factor will fall. It is the agricultural factor, and hence the changing relationship between productivity and market value of land, that determines the taxable value of the CAFO (along with replacement cost). This is an entirely arbitrary way to adjust the value of a CAFO. Productivity values are driven by historical costs and prices, while market values are driven by expectations of future costs and prices. The ratio of the two (the agricultural factor) will rise in some periods, fall in others, for reasons that have nothing to do with the profitability or value of a livestock building.

In addition, the argument that market conditions do not provide an accurate guide to the income capacity of a piece of agricultural property simply does not apply to single-purpose agricultural buildings such as CAFOs. In the case of such production facilities, market value should be based entirely on the income-generating capacity of the facility, making it an appropriate basis for assessment and taxation.

Using the productivity formula to set each county's total assessed value of agricultural property, which is then apportioned between land and buildings, also creates an increasingly arbitrary system for determining the value of a given parcel of agricultural property. Not only is a county's total assessed value calculated through a formula that has no way of measuring the factors specific to the productivity of agricultural buildings, but the assessed value of all land in a county is in turn dependent on the portion of the county's overall value that is assigned to buildings. Instead of increasing the tax base, the construction of new high-valued agricultural buildings in a county merely lowers the taxable value of land. This can actually decrease the county's tax base, particularly when new buildings claim the pollution control exemption. Part of the county's total assessed value is assigned to buildings, but buildings can then reduce their value through the pollution control exemption, which means that this value is "lost" and never re-assigned to parcels of agricultural land. (This could be solved simply by requiring the pollution control exemption to be taken first, before the reduction in land value by building value.)

Farm buildings are of course not the only type of agricultural property that has a taxable value set far below its market value. As Figure 1 (page 5) shows, farmland is only taxed on about 16 percent of its market value. Setting a low taxable value for farmland can benefit small-scale farmers who have less financial flexibility to respond to fluctuations in market conditions and who would be driven out of the

market if the cost of acquiring and maintaining farmland were not tied to the productivity of and ability to profit from that land. Again, this is a feature of a property tax system that was designed for a much different kind of agricultural production than now prevails in Iowa.

Some rationale still exists to protect against speculative pressures on land value in determining how agricultural land should be taxed. Even farmer-to-farmer sales of land, which are used in estimating the market value of farmland, can be affected by speculation since a farmer may purchase a parcel of land for crop production while knowing that he or she can eventually sell it to a developer. In this case, the value of the piece of land would be much higher than its productivity value, but the revenue generated from the land in the near future will still depend on its use as farmland rather than its potential as undeveloped real estate. This is why, for instance, the agricultural tax assessment system uses the backward-looking tool of the productivity formula to arrive at the value of a piece of land, rather than the forward-looking tool of market conditions. Policies to protect against speculation without distorting agricultural assessment to the extent of the current productivity formula are discussed in the section below.

Making More Fundamental Changes

The Department of Revenue has proposed two modifications related to the implementation of the agricultural factor rule. First, the Department recommends using a five-year average of farmland market values to calculate the agricultural building factor, as opposed to the single year (2006) values that were used to calculate the 2007 factor. The Department predicts that this would have the short-term effect of raising the average factor to an estimated 34 percent. This is no doubt a sensible reform; a single-year agricultural factor is much more volatile than the five-year productivity formula and causes building values to fluctuate substantially from one year to the next. Such a change would also make the numerator and denominator of the agricultural factor (productivity value over market value) consistent, since the productivity value is already a five-year average. In addition, the Department recommends establishing and promulgating up-to-date benchmark replacement costs for buildings. This would likely lead to higher estimated replacement costs across the state, which would increase the value to which the agricultural factor is applied and therefore increase the assessed values of agricultural buildings.

Separating Building and Land Assessment

While these proposals help bring greater uniformity and stability to the assessment of agricultural buildings in Iowa, they leave in place many of the shortcomings of the current system. One fundamental problem is that building assessments are tied to an arbitrary and inappropriate set of variables that have little to do with the building's value. Rather than continuing to treat agricultural buildings as if their value can be approximated with a formula designed to evaluate the income potential of cropland, agricultural buildings should be assessed the same way other buildings are assessed: on their actual or market value.

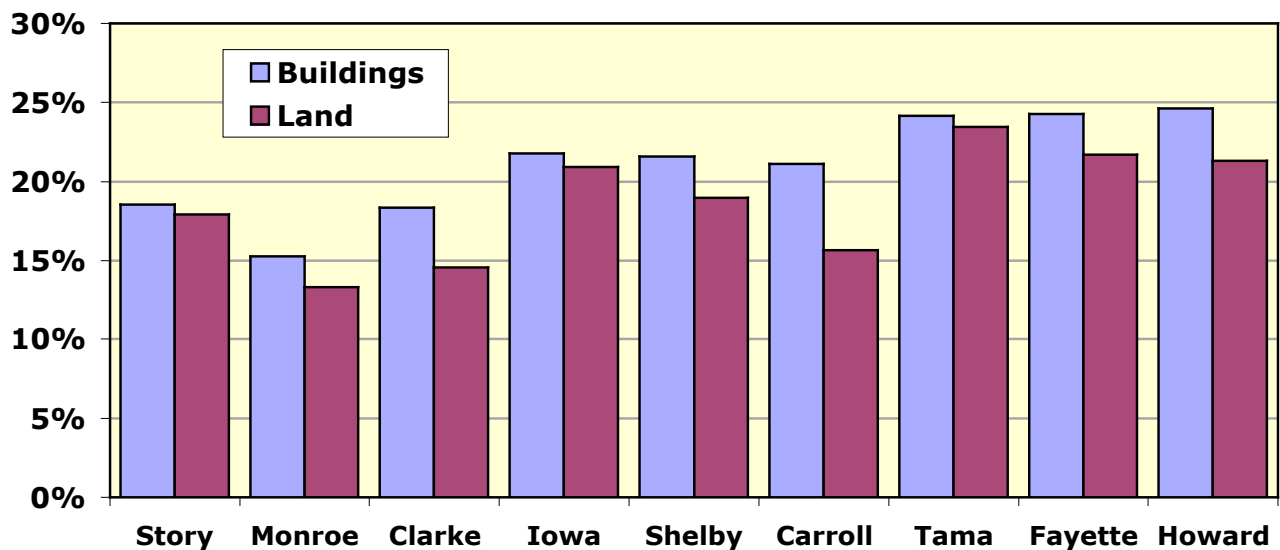
Further, while introducing benchmarks and changing the way that the agricultural factor is calculated will help address county-to-county disparities in how similar types of buildings are assessed, these reforms will not affect the "closed system" relationship between land and building assessments, under which any increase in building assessments due to more accurate benchmarks causes a corresponding decrease in land assessments within a county. Under this existing policy, any shift that brings the assessed value of agricultural buildings closer to its market value will only depress the value of agricultural land and shift it further away from its potential productivity value. This hampers the efficacy of any attempts to bring about sustainable uniformity in agricultural assessment since land values remain dependent on the number and value of buildings in a particular county. A similar parcel of land could be

valued differently in neighboring counties if one county had more of its total assessed value taken up by buildings and therefore had to assess land at a lower value.

Even after the Department's rule change, 2007 agricultural factors varied widely from one county to another because they are based on the ratio of productivity value to market value of land in a particular county. Productivity value varies between counties because it depends on the mix of crops and soil quality in each county, so it remains a poor choice for trying to facilitate uniformity in building assessments. While using a five-year average to calculate the factor will raise the *average* factor substantially, it will not necessarily standardize factors across counties and so will not address the uniformity problem.

Inter-county disparities that would persist even in the wake of reforms proposed by the Department of Revenue are implemented are illustrated in the chart below and in the table in Appendix II. The nine counties shown represent low, medium and high agricultural factors (from 17.1 percent to 29.8 percent) and low, medium and high ratios of building value to total assessed agricultural value (from 3.4 percent to 26.9 percent). The disparity remaining is substantial. Across these nine counties, buildings were assessed at rates as low as 15.3 percent of market value and as high as 24.6 percent, while land was assessed at 13.3 percent of market value in Monroe County and 23.5 percent in Tama County.

Figure 4. Taxable Value as a Percent of Market Value in Nine Iowa Counties, 2007



In order for agricultural property in Iowa to be fairly assessed and taxed, our property tax system must be structured to accurately measure the value of a piece of property. Agricultural buildings should not be valued according to the productivity of agricultural land, nor should their assessment artificially distort the value of land. New construction of agricultural buildings in a county should add to the county's tax base in order that the infrastructure needs associated with new economic development and changing forms of agricultural production can be met through, for instance, the construction and maintenance of county roads and the improvement of local schools.

In order to accomplish these goals, agricultural buildings and agricultural land should be assessed and taxed as two, separate types of agricultural property. When agricultural buildings are assessed independently according to their market value, landowners will experience an increase in their taxable valuation because buildings have been removed from the county's total valuation as determined by the

land productivity formula. The rollback, however, would prevent any rise in taxable value from exceeding 4 percent.

Table 3. Assessed Value Rises When Building And Land Assessments Are Separated

	Land	Buildings	Total	Increase
Assessed value in 2007	\$22,316,083,257	\$3,096,017,671	\$25,412,100,928	NA
Assessed value with new system	\$25,412,100,928	\$15,182,502,460	\$40,594,603,388	\$15,182,502,460
Taxable value, new system (rollback)	\$23,208,726,587	\$3,219,858,378	\$26,428,584,965	\$1,016,484,037

Table 3 shows the effects of using the productivity formula to calculate only the value of agricultural land, instead of the combined value of land and buildings. With this new system, agricultural buildings would be taxed on their market or replacement value, raising their assessed value to over \$15 billion. Under this methodology, the assessed value of land increases by approximately \$3 billion to equal the amount of assessed value that, under the current methodology, is divided among land and buildings. However, Table 3 also shows the rollback would limit increases in the assessed value of land to approximately \$890 million and increases in the assessed value of buildings to about \$124 million. The increase in total assessed value with the new system and the rollback amounts to about \$1 billion.

Agricultural buildings remain a part of the agricultural property class under this plan. However, there would now be two, separate methodologies for measuring the components of the total assessed value of agricultural property. As Table 3 makes clear, the rollback will limit the magnitude of change in building assessments that occurs with any implementation of a market-based assessment system. The difference between taxable and market value for buildings therefore remains large. The taxable value of buildings can be expected to increase by 4 percent each year; however, if the market value of these buildings grows at a rate above 4 percent, the ratio of taxable to market value for buildings may actually decline because increases in taxable value are limited by the rollback. Bringing the taxable value of buildings up to market value would require more fundamental changes related to the application of the rollback to this type of agricultural property, perhaps for a defined period of time or until certain benchmarks had been met.

Improving The Productivity Formula

Changes can also be made to the productivity formula itself so that the productivity value of agricultural land is calculated more accurately. As discussed above in the section “Assessing Agricultural Property in Iowa,” the productivity formula arrives at the productivity value by subtracting operating expenses from farm income. Income is calculated by examining the average yield per acre of a particular kind of crop, multiplying the yield by the number of acres of that type of crop to find the crop’s production level, and then multiplying production by the price of that crop. The different incomes from each type of crop are then added up to arrive at the total income for an agricultural property owner.

However, the formula mandates that income from corn, soybeans and oats, and non-tillable pasture acres is reduced by 50 percent, while income from hay and tillable pasture acres is reduced by 75 percent. Expenses per acre for each of these types of crops, which are subtracted from income before any taxes are applied to agricultural property, are not reduced by any factor. In essence, this feature of the productivity formula means that the taxable value of an acre of crops is cut at least in half. There is little justification for this adjustment. The argument for using the productivity formula to arrive at the value of agricultural property is that it can measure the actual components of this value in ways that market conditions cannot. This is why the productivity formula is based on the price, yield and acres under

cultivation for each type of crop. Cutting income by at least half means that the formula is, in fact, not able to accurately value the productivity of an acre of agricultural property.

A second feature of the productivity formula that deserves attention is the “dwelling adjustment” that reduces net income per acre by 10.6 percent in order to account for land that is unavailable to generate farm income because it is occupied by a house or other building. While it may be reasonable to remove land occupied by dwellings from calculations of land available to generate farm income, doing so on a percentage basis makes little sense. This provision assumes, for example, that 42 acres of a 400-acre farm generate no income because they are taken up by dwellings. It is hard to imagine that this is ever the case. The fact that the assessed value of buildings is taken out of a county’s total assessed value as calculated with the productivity formula also ends up meaning that there is a *de facto* double adjustment for farm buildings. The productivity formula reduces calculated farm income by 10.6 percent to account for land occupied by houses or buildings, and then the assessed value of land as determined by the productivity formula is further reduced by the percent of that value that is taken up by building value.

A more reasonable solution to this issue would be to allow local assessors to evaluate what portion of a parcel of agricultural land is being used for a residence, or to adopt a standard number of acres presumed to be associated with a farm dwelling for residential purposes, and assessing it as residential property. As it is, the land removed from agricultural assessment because it is presumed to be residential is not then added to the dwelling itself and assessed as residential; instead it simply goes untaxed.

A third aspect of the productivity formula that should be amended in order to enable more accurate assessments of the value of agricultural land is the capitalization rate. The capitalization rate, which translates the current value of a stream of income into a present value that estimates future income, is statutorily defined at 7 percent. In order to be an accurate measure of future income, the capitalization rate should vary from year to year depending on current market interest rates. With a variable or floating capitalization rate, land is still assessed and taxed according to its productivity value, but that productivity value is better calibrated to the actual value of land.

Finally, proposals to move from using a five-year rolling average to calculate the productivity value to using a 10-year rolling average would constrain the extent to which taxable value corresponds to changes in market conditions. Stability and predictability are important features of a tax system, but attempts to over-insulate the value of agricultural property from changes in crop prices can distort its fairness and push taxable values even farther away from an accurate reflection of the current value of land in farming. Concerns over dramatic decreases in agricultural property values, such as the 19 percent decrease experienced during 2003, and associated strains on county budgets could be addressed by limiting the amount these values are allowed to fall in any one year. Similar to the way that the rollback limits annual increases in value, setting a limit on annual decreases would help preserve stability without overly restricting the capacity of agricultural property values to respond to market conditions.

Implementing the Cash Rent Survey

As an alternative to the current productivity assessment formula, the assessment of farmland could also be made much simpler by basing it on cash rents. Iowa State University conducts an annual cash rent survey for every county in the state. This cash rent survey provides annually updated figures on the value of farmland to a farmer — how much the farmer can afford to pay to rent land and still farm it profitably. The cash rent is shown for land of low, medium and high quality for corn and soybean acres; it is also translated into cash rent per CSR point. Separate cash rents are also shown for oats, hay and pasture land. This would permit the valuation of each parcel on the basis of its CSR and county cash rents, which could be averaged over the previous five years to avoid drastic swings in valuation.

There is a sound basis for assessing land by capitalizing rents and assessing farm buildings based on replacement cost. If the goal of the assessment process is to determine market value, the most accurate way to achieve this goal is to look at recent sales. Where sales of comparable properties are too few to accurately gauge market prices, the next best alternative is to determine value based on the rental income that the property generates. This method of capitalizing rental income is routinely used for the assessment of rented residential and commercial property.

The use of capitalized cash rent for the valuation of agricultural land has several virtues. It is vastly simpler than the current productivity formula. It is more transparent and clearly related to the productive potential of the land. The cash rents also have the virtue of reflecting the current value of land in farming devoid of any speculative component based on possible future non-farm uses and future farm prices. Capitalized rent would in fact measure rather well exactly what the productivity formula claims to measure, but actually fails by a wide margin to capture.¹⁰

It also appears that cash rents are more stable than productivity values. Five-year average productivity value for 2001-05 was 5.4 percent higher than the 1999-2003 average, while the corresponding five-year average cash rent increased 4.7 percent. For the 2003-07 five-year averages, the increase was 18.7 percent for productivity values (compared to 2001-05), but just 6.4 percent for cash rent.¹¹ A shift to capitalized rent would raise the assessed value of farmland substantially, though it would still remain below market values. (That market values are above capitalized rent is evidence of a substantial speculative component to farmland values.) Obviously taxable values could not be allowed to rise dramatically, and in fact the rollback formula would prevent them from rising more than 4 percent in any year.

For 2006 assessments, the statewide average market value of farmland was \$3,204 per acre, while productivity value averaged \$746 (the five year average for 1999-2003) and taxable value averaged \$592. Now suppose that the assessment system had been changed in 2007 to one based on capitalized rent. The five-year statewide average cash rent for 2001-2005 would have been approximately \$115 per acre.¹² Capitalized at 7 percent, that would translate into a market value of \$1,646 per acre. The rollback for 2007 would have been .374. This would translate into a statewide average taxable value of \$616 (37.4 percent of \$1,646), a 4 percent increase over the 2006 taxable value.

Protecting Against Speculation

Using the cash rent survey would remove any influence of speculation on land values by measuring the value of land according to what it is worth to a farmer. Another way of reducing speculation would be to tighten the standards by which a piece of property is classified as agricultural. The default assessment of a piece of property should be 100 percent of market value (the standard for determining actual value of all non-agricultural land). In order for a piece of property to instead be assessed as agricultural, specific

¹⁰ An adjustment to cash rents would have to be made for landlord expenses: property taxes and certain other costs, such as maintenance of drainage systems. In other words, the net income that the landlord obtains is cash rent (which is what the farmer can pay from crop sales minus the costs of farming) less the expenses that remain the landlord's responsibility. This net rent would then be capitalized.

¹¹ Cash rent jumped from \$150 in 2007 to \$177 in 2008 (statewide average), which would produce a 7.2 percent increase in the five-year rolling average. We do not yet know, of course, if the corresponding five-year productivity value will increase more or less than 7.2 percent.

¹² The statewide average cash rent for row cropland (which accounts for 71 percent of the agricultural acres in the state) over this period was about \$128. Overall cash rent, taking into account rents for oats, hay and pasture land, as well as land in government programs, would have been approximately 90 percent of the row crop figure, or \$115. This is based on data from the annual cash rent survey conducted by Iowa State University Extension.

criteria would be applied to evaluate whether it is actually used for agricultural purposes. This provision would facilitate more accurate assessment and also limit speculation by making it more expensive.

Alternatively, land within a certain distance of a city limit (such as the two-mile extraterritorial zone) could be subject to deferred assessment at market value. Under this system, the land continues to be taxed as farmland, if used for agricultural purposes, but when it is converted to urban uses, back taxes are due based on market value assessment. In this case, no criteria are needed to determine whether the land should be presumed to be held in speculation. Instead, sale for development becomes after-the-fact proof of its development value and the tax preference that the land had received is recouped. This effectively prevents non-farmers from profiting from drastically lower farmland assessments while holding land in speculation, waiting for it to be ripe for development.

There is precedent for such a system in Iowa's law regarding deferred special assessments for farmland. When a city decides to finance infrastructure such as streets and storm sewers through a special assessment on adjoining land, the special assessment is deferred on property that continues to be farmed, but it is due upon conversion to non-farm uses. When applied more broadly, to property taxes in general, deferred assessment means that land held in speculation will ultimately have to contribute its share to the financing of the city services that made development of the land possible and profitable.

Conclusion

Changes by the Department of Revenue to the way that agricultural buildings are assessed in Iowa were necessary responses to an out-of-balance system. But more fundamental changes are needed to fairly and accurately assess agricultural property in Iowa. Agricultural production and the use of agricultural property in Iowa have changed substantially over the past few decades, but our property tax system has not evolved in tandem with these changes. As a result, building assessments have been artificially depressed at the same time that they have distorted land assessments. The factors that determine the value of cropland have little to do with the value of livestock buildings, and building valuations will rise and fall arbitrarily, depending on whether the productivity value of land has been increasing faster or slower in recent years than market value of land. Several features of the productivity formula have also kept land assessments artificially low by reducing calculated farm income and applying a fixed capitalization rate that cannot respond to market conditions.

Inter-county disparity in the assessment of agricultural property will continue, despite the Department's rule changes, as long as the current tie between the assessment of agricultural buildings and land is allowed to persist. In some cases, the Department of Revenue's recent rule change has brought about more uniformity, as was its intent, but in the process exacerbated the problem of building underassessment by directing many counties to lower their building assessments, often dramatically. The assessment of buildings should be separated from the assessment of land, and the actual value of buildings should be evaluated according to market conditions rather than through the use of the productivity formula.

Reform of Iowa's system of assessing agricultural property should clearly focus on improving fairness by assessing similar properties similarly, regardless of county. Owners of high-value agricultural buildings, which are largely used in commercial livestock operations, have benefited from a system that taxes buildings according to measures of value unrelated to their productivity. Using the productivity formula to assess all agricultural property has the effect of substantially underestimating the income capacity of agricultural buildings. While there may be justification for removing the speculative component in the market value of farmland, since the speculation may have nothing to do with use of

the land in farming, there is no justification for applying the same logic to specialized agricultural buildings, which have no alternative uses. Farmland can have high market value because it was bought with an eye to commercial development, but a CAFO cannot be turned into condos.

At the same time, current assessment practices also distort the assessment of agricultural land. Land assessments are dependent on the construction or demolition of agricultural buildings; as the Department's rule change demonstrates, landowners can see their assessments change significantly as a result of how buildings are assessed. The productivity formula includes arbitrary provisions that artificially deflate farm income and fail to reflect the value that farmers themselves accord to parcels of land, undermining the notion that it better measures the actual value of agricultural land.

Agricultural property taxes are an important source of revenue for county governments, which depend on them to fund essential items and services. Ultimately, simplifying the agricultural property system by separating the assessment of buildings and land and using measures of productivity value appropriate for each type of property are crucial to ensuring fairness and stability in Iowa's agricultural property assessments.

Appendix I: Rollback explanation

The rollback calculation is best explained through an example. Suppose the statewide total actual value of residential property in 2004 was \$100 billion, and the rollback that year was 50 percent. Then the statewide total taxable value would be \$50 billion. Suppose by 2005 that residential market value had risen 6 percent to \$106 billion. Taxable value, however, cannot by law increase more than 4 percent statewide, which means that taxable value for 2005 must instead be \$52 billion. The rollback percentage is therefore the ratio of taxable to actual value that will produce this 4 percent growth in taxable value. In other words, the rollback for 2005 must be $52/106$, or .4906.

This means that all assessors must apply the ratio .4906 to the actual value of each residential parcel, regardless of how rapidly or slowly home prices increased in their jurisdiction. A home worth \$100,000 in 2004 in a declining area might still be worth just \$100,000 on the market in 2005, but its taxable value will decline about 2 percent, from \$50,000 to \$49,060, because the rollback declined from .50 to .4906. On the other hand, a \$100,000 home in a growing area might have increased in value to \$112,000, in which case its taxable value will increase from \$50,000 to \$54,947 (almost a 5 percent increase). Thus the rollback disadvantages slow growing areas relative to rapidly growing areas; the slow-growing areas may see an actual decline in taxable value over time even while the costs of government increase simply due to inflation. Rapidly growing areas can see an increase in the tax base, though a smaller one than would result in the absence of a rollback.

Appendix II: Variation across Iowa counties in taxable value of land and buildings as a percent of market value, 2007 assessment year

Variation across Iowa counties in taxable value of land and buildings as a percent of market value, 2007 assessment year

County	State totals	Low Ag Factor			Average Ag Factor			High Ag Factor			
		Buildings: Percent of Ag Value			Buildings: Percent of Ag Value			Buildings: Percent of Ag Value			
		low	middle	high	low	middle	high	low	middle	high	
		Story	Monroe	Clarke	Iowa	Shelby	Carroll	Tama	Fayette	Howard	
A	Ag factor	24.3*	20.6	17.1	20.7	24.5	24.0	23.8	27.7	27.5	29.8
	Buildings as percent of total taxable ag value	14.3%	3.4	13.7	21.8	5.1	12.2	26.9	5.9	12.3	20.6
	Land										
B	Market value of ag land	122,809,300,000	1,271.7	518.9	461.8	1,075.3	1,182.2	1,232.3	1,376.7	1,438.0	740.0
C	Productivity value of ag land	25,412,100,928	262.0	88.7	95.6	263.5	283.7	293.3	381.3	395.4	220.5
	Buildings										
D	Market value #	15,182,502,460	43.6	71.6	102.0	55.2	144.0	335.9	83.8	179.6	166.2
E	Pollution control exemption	220,348,640	0.0	0.6	1.5	0.7	0.0	4.7	2.6	3.4	13.7
F	Market value less exemptions	14,962,153,820	43.6	71.1	100.5	54.5	144.0	331.3	81.2	176.2	152.5
G	Buildings: Assessed value (F x A)	3,635,803,378	9.0	12.2	20.8	13.4	34.5	78.8	22.5	48.5	45.4
H	Land: assessed value (C - G)	21,776,297,550	253.0	76.6	74.8	250.1	249.2	214.5	358.9	347.0	175.1
I	Rollback	0.900102	0.900102	0.900102	0.900102	0.900102	0.900102	0.900102	0.900102	0.900102	0.900102
	Taxable value										
J	Buildings (I x G)	3,272,594,983	8.1	10.9	18.7	12.0	31.1	71.0	20.2	43.6	40.9
K	Land (I x H)	19,600,895,510	227.7	68.9	67.3	225.1	224.3	193.0	323.0	312.3	157.6
	Taxable value as a percent of market value										
L	Buildings (J / D)	21.6%	18.5%	15.3%	18.4%	21.8%	21.6%	21.1%	24.2%	24.3%	24.6%
M	Land (K / B)	16.0%	17.9%	13.3%	14.6%	20.9%	19.0%	15.7%	23.5%	21.7%	21.3%

*calculated average

Market value is estimated using replacement cost new less depreciation.

Appendix III: County data on agricultural and building assessments in Iowa, 2006-2007

County	2006 Total Agricultural Land & Buildings (\$)	2006 Agricultural Land Value (\$)	Land as share of 2006 total	2006 Agricultural Buildings Value (\$)	Buildings as share of 2006 total	2007 Total Agricultural Land & Buildings (\$)	2007 Agricultural Land Value (\$)	Land as share of 2007 total	2007 Agricultural Buildings Value (\$)	Buildings as share of 2007 total	Total valuation change, 2006- 2007 (%)	Land valuation change, 2006-2007 (\$)	Land valuation change (%)	Building valuation change, 2006- 2007 (\$)	Building valuation change, 2006-2007 (%)
ADAIR	182,231,951	177,074,957	97	5,156,994	3	201,924,707	196,514,028	97	5,410,679	3	10.8	19,439,071	11.0	253,685	4.9
ADAMS	129,649,601	113,512,408	88	16,137,193	12	151,904,053	132,719,320	87	19,184,733	13	17.2	19,206,912	16.9	3,047,540	18.9
ALLAMAKEE	212,146,496	176,964,640	83	35,181,856	17	228,436,840	191,467,660	84	36,969,180	16	7.7	14,503,020	8.2	1,787,324	5.1
APPANOOSE	95,577,403	83,518,030	87	12,059,373	13	102,524,459	89,288,205	87	13,236,253	13	7.3	5,770,175	6.9	1,176,880	9.8
AUDUBON	154,338,700	123,585,720	80	30,752,980	20	196,831,400	153,232,950	78	43,598,450	22	27.5	29,647,230	24.0	12,845,470	41.8
BENTON	375,677,250	342,609,750	91	33,067,500	9	447,809,814	414,356,514	93	33,453,300	7	19.2	71,746,764	20.9	385,800	1.2
BLACK HAWK	252,631,930	216,451,250	86	36,180,680	14	292,318,477	248,524,511	85	43,793,967	15	15.7	32,073,261	14.8	7,613,287	21.0
BOONE	227,438,680	207,332,331	91	20,106,349	9	295,810,493	275,532,870	93	20,277,623	7	30.1	68,200,539	32.9	171,274	0.9
BREMER	200,183,130	166,383,060	83	33,800,070	17	223,244,677	181,067,410	81	42,177,267	19	11.5	14,684,350	8.8	8,377,197	24.8
BUCHANAN	286,266,957	240,625,589	84	45,641,368	16	292,057,822	240,499,700	82	51,558,122	18	2.0	-125,889	-0.1	5,916,754	13.0
BUENA VISTA	262,667,695	209,523,280	80	53,144,415	20	313,357,432	257,350,161	82	56,007,271	18	19.3	47,826,881	22.8	2,862,856	5.4
BUTLER	263,271,014	234,996,482	89	28,274,532	11	307,630,550	272,435,528	89	35,195,022	11	16.8	37,439,046	15.9	6,920,490	24.5
CALHOUN	253,893,900	235,836,380	93	18,057,520	7	315,976,910	304,245,620	96	11,731,290	4	24.5	68,409,240	29.0	-6,326,230	-35.0
CARROLL	222,699,250	166,313,850	75	56,385,400	25	293,298,889	214,455,753	73	78,843,136	27	31.7	48,141,903	28.9	22,457,736	39.8
CASS	177,564,358	155,636,834	88	21,927,524	12	226,459,512	197,519,130	87	28,940,382	13	27.5	41,882,296	26.9	7,012,858	32.0
CEDAR	321,749,740	297,521,630	92	24,228,110	8	322,483,640	297,192,730	92	25,290,910	8	0.2	-328,900	-0.1	1,062,800	4.4
CERRO GORDO	244,040,302	212,319,567	87	31,720,735	13	290,982,481	258,400,276	89	32,582,205	11	19.2	46,080,709	21.7	861,470	2.7
CHEROKEE	275,729,900	221,571,642	80	54,158,258	20	341,589,791	320,842,325	94	20,747,466	6	23.9	99,270,683	44.8	-33,410,792	-61.7
CHICKASAW	233,520,708	205,400,624	88	28,120,084	12	281,715,000	253,975,700	90	27,739,300	10	20.6	48,575,076	23.6	-380,784	-1.4
CLARKE	84,936,012	67,524,120	79	17,411,892	21	95,599,810	74,787,200	78	20,812,610	22	12.6	7,263,080	10.8	3,400,718	19.5
CLAY	282,654,030	252,349,460	89	30,304,570	11	303,712,460	289,112,610	95	14,599,850	5	7.5	36,763,150	14.6	-15,704,720	-51.8
CLAYTON	320,941,644	260,147,631	81	60,794,013	19	355,190,253	292,151,308	82	63,038,945	18	10.7	32,003,677	12.3	2,244,932	3.7
CLINTON	351,021,484	321,526,258	92	29,495,226	8	340,600,656	321,432,556	94	19,168,100	6	-3.0	-93,702	0.0	-10,327,126	-35.0
CRAWFORD	264,625,960	209,055,775	79	55,570,185	21	337,981,340	275,616,485	82	62,364,855	18	27.7	66,560,710	31.8	6,794,670	12.2
DALLAS	186,020,810	156,190,200	84	29,830,610	16	243,061,382	203,883,108	84	39,178,275	16	30.7	47,692,908	30.5	9,347,665	31.3
DAVIS	106,445,311	82,286,255	77	24,159,056	23	113,332,035	99,959,979	88	13,372,056	12	6.5	17,673,724	21.5	-10,787,000	-44.6
DECATUR	84,187,109	70,745,102	84	13,442,007	16	100,805,833	82,017,946	81	18,787,887	19	19.7	11,272,844	15.9	5,345,880	39.8
DELAWARE	307,434,900	249,537,300	81	57,897,600	19	306,858,800	242,843,100	79	64,015,700	21	-0.2	-6,694,200	-2.7	6,118,100	10.6
DES MOINES	151,648,700	124,859,700	82	26,789,000	18	191,376,699	164,209,699	86	27,167,000	14	26.2	39,349,999	31.5	3,788,000	1.4
DICKINSON	161,702,800	144,555,000	89	17,147,800	11	171,819,500	153,789,000	90	18,030,500	10	6.3	9,234,000	6.4	882,700	5.1
DUBUQUE	249,697,697	183,161,727	73	66,535,970	27	285,890,679	219,667,786	77	66,222,893	23	14.5	36,506,059	19.9	-313,077	-0.5
EMMET	176,595,269	137,822,181	78	38,773,088	22	203,050,269	162,097,681	80	40,952,588	20	15.0	24,275,500	17.6	2,179,500	5.6
FAYETTE	353,713,260	311,308,530	88	42,404,730	12	395,449,824	346,993,554	88	48,456,270	12	11.8	35,685,024	11.5	6,051,540	14.3
FLOYD	225,350,730	192,666,340	85	32,684,390	15	259,082,880	225,511,140	87	33,571,740	13	15.0	32,844,800	17.0	887,350	2.7
FRANKLIN	291,947,847	259,242,247	89	32,705,600	11	348,713,500	311,052,400	89	37,661,100	11	19.4	51,810,153	20.0	4,955,500	15.2
FREMONT	158,265,710	145,048,190	92	13,217,520	8	193,266,392	179,427,442	93	13,838,950	7	22.1	34,379,252	23.7	621,430	4.7
GREENE	231,632,760	214,485,760	93	17,147,000	7	290,259,300	282,301,800	97	7,957,500	3	25.3	67,816,040	31.6	-9,189,500	-53.6
GRUNDY	268,481,236	235,221,543	88	33,259,693	12	322,442,171	285,917,336	89	36,524,835	11	20.1	50,695,793	21.6	3,265,142	9.8
GUTHRIE	184,979,625	167,256,750	90	17,722,875	10	228,192,369	205,628,259	90	22,564,110	10	23.4	38,371,509	22.9	4,841,235	27.3
HAMILTON	257,030,080	213,278,690	83	43,751,390	17	313,056,530	270,822,010	87	42,234,520	13	21.8	57,543,320	27.0	-1,516,870	-3.5
HANCOCK	284,453,497	255,734,475	90	28,719,022	10	322,134,539	288,863,206	90	33,271,332	10	13.2	33,128,731	13.0	4,552,310	15.9
HARDIN	289,570,960	255,917,880	88	33,653,080	12	349,579,053	304,486,323	87	45,092,730	13	20.7	48,568,443	19.0	11,439,650	34.0
HARRISON	217,773,970	200,693,874	92	17,080,096	8	256,644,253	239,609,364	93	17,034,889	7	17.8	38,915,490	19.4	-45,207	-0.3
HENRY	158,556,956	136,547,362	86	22,009,594	14	189,060,550	164,912,812	87	24,147,738	13	19.2	28,365,450	20.8	2,138,144	9.7
HOWARD	211,947,560	174,984,040	83	36,963,520	17	220,521,270	175,079,760	79	45,441,510	21	4.0	95,720	0.1	8,477,990	22.9
HUMBOLDT	192,223,870	174,603,967	91	17,619,903	9	230,035,743	209,461,359	91	20,574,384	9	19.7	34,857,392	20.0	2,954,310	16.8
IDA	181,311,750	159,300,180	88	22,011,570	12	236,496,864	203,726,234	86	32,770,630	14	30.4	44,426,054	27.9	10,759,060	48.9
IOWA	251,295,660	221,558,630	88	29,737,030	12	263,453,590	250,103,140	95	13,350,450	5	4.8	28,544,510	12.9	-16,386,580	-55.1
JACKSON	238,174,250	225,566,350	95	12,607,900	5	238,343,550	225,364,450	95	12,979,100	5	0.1	-201,900	-0.1	371,200	2.9
JASPER	299,352,347	259,926,150	87	39,426,197	13	360,566,437	319,915,530	89	40,650,907	11	20.4	59,989,380	23.1	1,224,710	3.1

County	2006 Total Agricultural Land & Buildings (\$)	2006 Land	2006 Agricultural Value (\$)	Land as share of 2006 total	2006 Agricultural Buildings Value (\$)	Buildings as share of 2006 total	2007 Total Agricultural Land & Buildings (\$)	2007 Land	2007 Agricultural Value (\$)	Land as share of 2007 total	2007 Agricultural Buildings Value (\$)	Buildings as share of 2007 total	Total valuation change, 2007 (%)	Land valuation change, 2007 (\$)	Land valuation change (%)	Building valuation change, 2007 (\$)	Building valuation change, 2007 (%)
JEFFERSON	118,926,346		100,661,968	85	18,264,378	15	164,234,742		137,749,953	84	26,484,789	16	38.1	37,087,985	36.8	8,220,411	45.0
JOHNSON	213,713,851		173,418,489	81	40,295,362	19	238,663,920		214,506,088	90	24,157,831	10	11.7	41,087,599	23.7	-16,137,551	-40.0
JONES	273,761,035		242,359,995	89	31,401,040	11	302,810,997		269,527,827	89	33,283,170	11	10.6	27,167,832	11.2	1,882,130	6.0
KEOKUK	222,093,790		181,782,940	82	40,310,850	18	258,057,259		237,941,866	92	20,115,393	8	16.2	56,158,926	30.9	-20,195,457	-50.1
KOSSUTH	484,244,239		435,834,166	90	48,410,073	10	555,109,597		500,880,080	90	54,229,517	10	14.6	65,045,914	14.9	5,819,444	12.0
LEE	151,197,801		130,118,301	86	21,079,500	14	178,312,726		152,438,269	85	25,874,456	15	17.5	22,319,968	17.2	4,794,956	22.7
LINN	266,569,246		247,084,544	93	19,484,702	7	306,157,113		283,317,935	93	22,839,178	7	14.5	36,233,391	14.7	3,354,476	17.2
LOUISA	146,242,281		121,522,046	83	24,720,235	17	169,919,692		143,567,746	84	26,351,946	16	16.2	22,045,700	18.1	1,631,711	6.6
LUCAS	70,142,245		58,382,023	83	11,760,222	17	75,143,395		62,463,999	83	12,679,396	17	7.1	4,081,976	7.0	919,179	7.8
LYON	289,278,287		242,606,037	84	46,672,250	16	326,730,656		271,616,658	83	55,113,998	17	12.5	29,010,621	12.0	8,441,748	18.1
MADISON	140,628,050		114,494,900	81	26,133,150	19	160,801,242		133,741,647	83	27,059,595	17	14.3	19,246,747	16.8	926,445	3.5
MAHASKA	236,014,760		185,917,485	79	50,097,275	21	277,884,299		215,410,811	78	62,473,488	22	17.7	29,493,326	15.9	12,376,218	24.7
MARION	151,774,464		136,146,730	90	15,627,734	10	181,033,355		166,196,240	92	14,837,115	8	19.3	30,049,510	22.1	-790,619	-5.1
MARSHALL	249,429,211		208,062,500	83	41,366,711	17	309,461,713		299,374,802	97	10,086,911	3	24.1	91,312,302	43.9	-31,279,800	-75.6
MILLS	138,114,559		121,178,911	88	16,935,648	12	176,524,225		154,890,236	88	21,633,989	12	27.8	33,711,325	27.8	4,698,341	27.7
MITCHELL	216,792,720		185,401,180	86	31,391,540	14	246,522,060		208,441,960	85	38,080,100	15	13.7	23,040,780	12.4	6,688,560	21.3
MONONA	233,689,443		215,076,348	92	18,613,095	8	266,200,663		247,521,447	93	18,679,216	7	13.5	32,445,099	15.1	66,120	0.4
MONROE	83,852,309		72,263,053	86	11,589,256	14	88,740,016		76,586,281	86	12,153,735	14	5.8	4,323,228	6.0	564,479	4.9
MONTGOMERY	147,602,195		133,880,960	91	13,721,235	9	182,646,575		168,870,080	92	13,776,495	8	23.7	34,989,120	26.1	55,260	0.4
MUSCATINE	182,581,480		163,515,870	90	19,065,610	10	202,760,860		189,038,280	93	13,722,580	7	11.1	25,522,410	15.6	-5,343,030	-28.0
O'BRIEN	294,224,753		258,373,375	88	35,851,378	12	322,628,006		283,906,960	88	38,721,046	12	9.7	25,533,585	9.9	2,869,668	8.0
OSCEOLA	192,814,301		157,509,000	82	35,305,301	18	209,964,356		174,774,944	83	35,189,412	17	8.9	17,265,944	11.0	-115,889	-0.3
PAGE	151,687,241		140,766,763	93	10,920,478	7	190,879,870		179,637,030	94	11,242,840	6	25.8	38,870,267	27.6	322,362	3.0
PALO ALTO	267,063,070		212,298,320	79	54,764,750	21	293,756,288		236,679,768	81	57,076,520	19	10.0	24,381,448	11.5	2,311,770	4.2
PLYMOUTH	356,871,731		289,989,461	81	66,882,270	19	418,982,910		360,372,000	86	58,610,910	14	17.4	70,382,539	24.3	-8,271,360	-12.4
POCAHONTAS	276,987,578		258,935,704	93	18,051,874	7	325,953,851		302,667,517	93	23,286,334	7	17.7	43,731,813	16.9	5,234,460	29.0
POLK	120,539,450		108,836,970	90	11,702,480	10	147,612,170		137,023,520	93	10,588,650	7	22.5	28,186,550	25.9	-1,113,820	-9.5
POTTAWATTAMIE	350,219,347		299,631,728	86	50,587,619	14	445,596,467		380,285,055	85	65,311,412	15	27.2	80,653,327	26.9	14,723,793	29.1
POWESHIEK	255,368,790		213,327,140	84	42,041,650	16	301,714,378		256,804,171	85	44,910,202	15	18.1	43,477,033	20.4	2,868,552	6.8
RINGGOLD	117,229,583		89,702,784	77	27,526,799	23	133,492,448		105,196,194	79	28,296,254	21	13.5	15,493,410	17.3	769,455	2.8
SAC	241,404,750		204,777,540	85	36,627,210	15	308,090,560		267,136,160	87	40,954,400	13	27.6	62,358,620	30.5	4,327,190	11.8
SCOTT	200,307,570		162,663,950	81	37,643,620	19	205,670,330		189,827,560	92	15,842,770	8	2.7	27,163,610	16.7	-21,800,850	-57.9
SHELBY	226,943,496		205,994,239	91	20,949,257	9	283,733,115		249,184,279	88	34,548,836	12	25.0	43,190,400	21.0	13,599,579	64.9
SIoux	396,844,927		297,699,811	75	99,145,116	25	435,537,057		325,904,569	75	109,632,488	25	9.7	28,204,758	9.5	10,487,372	10.6
STORY	220,517,400		210,432,400	95	10,085,000	5	261,966,600		252,982,000	97	8,984,600	3	18.8	42,549,600	20.2	-1,100,400	-10.9
TAMA	315,716,620		295,607,950	94	20,108,670	6	381,345,978		358,858,598	94	22,487,380	6	20.8	63,250,648	21.4	2,378,710	11.8
TAYLOR	143,587,954		117,660,790	82	25,927,164	18	173,096,261		141,212,748	82	31,883,513	18	20.6	23,551,958	20.0	5,956,345	23.0
UNION	104,671,620		84,682,396	81	19,989,224	19	128,680,520		103,289,575	80	25,390,945	20	22.9	18,607,179	22.0	5,401,720	27.0
VAN BUREN	101,470,002		86,194,324	85	15,275,678	15	122,636,391		112,961,651	92	9,674,740	8	20.9	26,767,327	31.1	-5,600,938	-36.7
WAPELLO	104,807,885		90,805,299	87	14,002,586	13	139,918,897		120,744,014	86	19,174,883	14	33.5	29,938,715	33.0	5,172,297	36.9
WARREN	132,595,700		118,167,600	89	14,428,100	11	153,631,908		136,326,215	89	17,305,692	11	15.5	18,158,616	15.4	2,877,592	19.9
WASHINGTON	232,795,800		187,411,900	81	45,383,900	19	261,900,087		230,462,640	88	31,437,447	12	12.5	43,050,740	23.0	-13,946,458	-30.7
WAYNE	112,560,959		101,675,629	90	10,885,330	10	121,282,529		110,603,355	91	10,679,174	9	7.7	8,927,726	8.8	-206,154	-1.9
WEBSTER	301,413,765		284,854,147	95	16,559,618	5	371,320,199		349,749,589	94	21,570,611	6	23.2	64,895,442	22.8	5,010,998	30.3
WINNEBAGO	180,320,040		155,706,990	86	24,613,050	14	213,576,860		181,653,620	85	31,923,240	15	18.4	25,946,630	16.7	7,310,190	29.7
WINNESHIEK	289,043,144		250,208,074	87	38,835,070	13	312,073,711		267,640,238	86	44,433,473	14	8.0	17,432,164	7.0	5,598,403	14.4
WOODBURY	307,025,420		281,982,510	92	25,042,910	8	307,573,150		281,791,820	92	25,781,330	8	0.2	-190,690	-0.1	738,420	2.9
WORTH	180,570,098		169,482,918	94	11,087,180	6	208,079,170		194,929,641	94	13,149,529	6	15.2	25,446,723	15.0	2,062,345	18.6
WRIGHT	264,815,900		204,572,000	77	60,243,900	23	321,394,700		274,074,400	85	47,320,300	15	21.4	69,502,400	34.0	-12,923,600	-21.5
STATE OF IOWA	21,670,088,014		18,682,864,892	86	2,987,223,122	14	25,160,814,637		22,074,612,978	88	3,086,201,659	12	16.1	3,391,748,086	18.2	98,978,537	3.3