

# By How Much Can Appraised Farm Values Differ Across Appraisers?



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## Abstract

*We compared 54 appraisal reports, completed by nine Certified General Appraisers (CGAs) for three Iowa farms at two points in time (2019 and 2020), to evaluate the variability of appraised values and its causes. Our findings confirm that, despite the norms and regulations that CGAs abide by, the appraisal process is subjective in nature, and appraised values can differ by as much as 20% of their average appraised values. Furthermore, observed discrepancies*

*in basic facts considered by CGAs to form their expert opinions on the value of a farm, such as tillable acres and productivity indexes, are non-trivial.*

## INTRODUCTION

Rural property appraisals are used to inform the value of rural property to interested parties in multiple situations, including loan determinations, litigations, partition cases, financial and estate planning, condemnation, and right-of-way disputes. An appraisal is a systematic process of classifying and evaluating the characteristics of an asset in order to make a well-reasoned judgment of its value (Murray et al., 1983). The appraisal process typically involves collecting relevant data, inspecting the asset in person, and organizing and analyzing data to arrive at a value opinion (ASFMRA 2021). Appraisers must follow certain established procedures to complete an appraisal.

In 1989, U.S. Congress established a real estate appraiser regulatory system involving the federal government, the states, and the Appraisal Foundation and authorized federal bank regulators to require appraisals for real estate loans made by federally regulated financial institutions. Currently, federal law requires that any real estate loan for \$250,000 or more must be supported by an appraisal by a Certified Appraiser. The Foundation's Appraiser Qualifications Board sets the minimum Real Property Appraiser Qualification Criteria, and the Appraisal Standards Board develops the Uniform Standards of Professional Appraisal Practice (USPAP). The USPAP is the generally recognized set of ethical and performance standards for the appraisal profession in the United States. Furthermore, each U.S. state has a real estate appraiser regulatory agency that is responsible for licensing and certifying real estate appraisers and supervising their appraisal-related activities (The Appraisal Foundation, 2023).

Despite the regulated nature of the appraisal profession, and because appraising rural property is giving a well-informed opinion of the value of the property, the appraiser's well-reasoned judgments are critical in the appraising process. For example, for the sales comparison approach to valuation, appraisers are tasked to identify the "area" with similar influences or delineate the "neighborhood" of homogeneous uses in which the property would compete. Farmland sales are generally less frequent and more heterogeneous than urban real estate property, so the rural appraiser's judgment plays a key role in choosing which set of recent sales from a geographically wide rural real estate market to include in the analysis (ASFMRA, 2023). Another instance when appraisers' judgments can strongly influence the resulting appraised value is when selecting the expected cash rent and the comparable sales that inform the calculation of the capitalization rate used in the income approach to valuation, as the property value is calculated as net income divided by the capitalization rate. A third example consists of the expert judgments called for on the value adjustments in the market or sales comparison approach due to differences in the characteristics of the properties compared, such as the "farmability" of a parcel or "ease of access" adjustments (Drozd and Johnson, 2004).

While previous research has concluded that average farmland values from expert opinion surveys (Shultz, 2006; Stinn and Duffy, 2012; Zhang et al. 2021), as well as from agricultural producers' self-reported farmland value estimates (Bigelow, Ifft, and Kuethe, 2020), are poor predictors of transacted farmland values, the peer-reviewed literature on comparisons of appraised values across Certified Appraisers is scant. Ma and Swinton (2012) documented that the variability in the tax-assessment appraised values for 203 land parcels determined by local assessors in the tax equalization offices of 33 townships in Michigan was lower than the variability in land sale values for the same 203 parcels. However, we are not aware of any previous study analyzing the magnitude and sources of variability in appraised values by Certified General Appraisers (CGAs) for the same set of farms.

The present article quantifies the variability in appraised values of three Iowa farms across nine CGAs in two consecutive years and identifies the major sources of discrepancies in the appraisal process. To the best of our knowledge, this is the first study to document the impact of subjective appraisers' judgments on appraised farmland values.

## MATERIALS AND METHODS

With the approval of Iowa State University's Institutional Review Board (Study 18-366-00), our team hired nine CGAs to appraise three farms in Washington County, Iowa, in 2019 and 2020.

The participating CGAs were randomly selected from the list of members of the Iowa Chapter of the American Society of Farm Managers and Rural Appraisers (ASFMRA) in late 2018. To mitigate the potential effect of information-sharing among participating appraisers, participants were recruited from competing real estate companies and signed confidentiality agreements. Appraisers were explicitly instructed to freely choose the methods that they would use to generate the appraisal reports, as well as the effort and time devoted to each appraisal, to avoid influencing their evaluations. The appraisal authorization contract or transmittal letter stated the subject property address, the deed holder contact information, the assessed acres to be appraised as a whole, the appraisal effective date (April 1 of each year), the contact information of the local Farm Service Agency (FSA) office staff member who had received the information release requests signed by the deed holders, the contact information for the person who would evaluate property inspection requests, the monetary compensation for each appraisal report, the preferred method of delivery (U.S. Postal Service and email), and the intended user of the appraisal (only our team members). Importantly, the transmittal letter also stated that the intended use of the appraisal report was "research purposes, treat as developing a selling price." Appraisers received monetary compensation from our team after submitting each set of three appraisal reports, one in mid-2019 and the other one in mid-2020.

The three farms were identified with the support of Practical Farmers of Iowa following the premise that they had to be in long-term corn and soybean rotations and actively farmed, lack major structures or improvements that would complicate the appraisal process, and consist mostly of tillable acres with non-extreme productivity indexes. The owner-operators of the participating farms (called A, B, and C to maintain anonymity) received monetary compensation as well as a report on their own farm's appraised values (but not for the farms they did not own), and they, in turn, authorized the local FSA office to release the following information to each of the nine appraisers for the completion of their appraisal process: 156-EZ reports, field maps, and copies of any Conservation Reserve Program (CRP) contracts. According to their owners,

Farm A was 113.4 acres in size, of which 104.7 were tillable with an average corn suitability rating (CSR2)<sup>1</sup> of 87.2; Farm B was 78.6 acres in size, of which 72.9 were tillable with an average CSR2 of 57.8; and Farm C was 69.6 acres in size, of which 65.7 were tillable with an average CSR2 of 57.3.

The analysis of the appraisal reports by our team members consisted of identifying a list of variables of interest within each report, and the evaluating similarities and differences across appraisers (identified as appraiser IDs 1 through 9 to maintain anonymity) and across years.

## RESULTS

Table 1 shows the appraised values for Farm A across the nine appraisers, three appraisal methods, and both years. The mean appraised value as of April 1, 2019, amounted to \$1,136,003, with a standard deviation of \$66,617, or 5.9% of the mean value (i.e., the coefficient of variation = 5.9%). The range, or difference between the highest and lowest appraised value, amounted to \$194,075, or 17.1% of the mean value. Since Farm A did not have major improvements or structures, three appraisers chose not to include a cost valuation. Across the three valuation methods, the coefficients of variation (i.e., the standard deviations divided by mean values) were close to 6%, and the range percentages (i.e., the ranges of values divided by mean values) were between 15% and 17%. These differences in appraised values by CGAs is a strong indication that farmland valuation is highly subjective, with strong implications for lending, estates, and strategic planning of agricultural stakeholders.

The mean appraised value for Farm A as of April 1, 2020, amounted to \$1,189,300, or 4.7% higher than a year earlier. Interestingly, while the coefficients of variation for the income and the cost approach were higher in 2020 than in 2019 (6.9% vs. 6.0% and 7.6% vs. 6.5%, respectively), reflecting the increased uncertainty from the COVID-19 pandemic, the coefficient of variation for the comparative sales approach was slightly lower: 5.5% vs. 5.9%. More importantly, while the range percentages increased across valuation methods from 2019 to 2020, the same indicator declined for the appraised values. A lower coefficient of variation and a smaller range of prices in 2020 than in 2019 indicate that appraised values were more similar in 2020 than in 2019, despite higher market uncertainty from COVID-19, underscoring the subjective nature of the appraisal process.

The mean appraised value for Farm B as of April 1, 2019, amounted to \$520,463 (Table 2), and the coefficient of variation (5.5%) and the range percentage (17.6%) were similar to those for Farm A in the same year. Three major differences between the appraised values for Farm B and Farm A were that the income approach to valuation produced the highest dispersion of values in the former (and the lowest dispersion in the latter); that the mean appraised value was only 0.6% higher in 2020 than in 2019 in the former (and 4.7% higher in the latter); and that the overall dispersion around the mean value was similar across years in the former (and slightly lower in the latter).

The mean appraised value for Farm C as of April 1, 2019, was \$469,744 (Table 3), and the coefficient of variation (5.2%) and the range percentage (15.0%) were similar to the two other farms in 2019. The range percentages were higher in 2020 than in 2019 for Farm C across the four valuations, and all but one coefficients of variation were higher in 2020 than in 2019 (the exception was the comparative sales approach: 4.6% vs. 5.3%). The appraised values for Farm C increased, on average, by 1.6% across years, but the dispersion around the mean also increased slightly.

Table 4 shows the linear correlation coefficients between each valuation approach and the final appraised value in each year, across years. The comparative sales approach series was the most correlated with the final appraised value series (except for Farm C in 2020). In 2020, a year of high market uncertainty due to COVID-19, the correlation between the values obtained with each valuation approach and the final appraised value were lower than in 2019 (except for the cost approach in Farm C). All in all, it seems that appraisers put more weight on the sales comparison approach than in the other two valuation methods and when faced with higher uncertainty, relied more heavily on subjective perceptions.

To illustrate the similarities and differences in the appraisal reports completed by the CGAs, Table 5 compares the variables of interest from the nine appraisal reports completed in 2019 for Farm A (Appendix Section 1 expands the analysis to Farms B and C). As expected, all appraisers used April 1, 2019, as the effective date of appraisal. However, the property was inspected, on average, 43 days later, and the appraisal reports were signed 75 days later. All appraisers followed the USPAP, personally inspected the property, valued the farmland as “fee simple,” used aerial maps and soil maps, considered the CRP encumbrance on the property, and used the sales and income approach to value to form their

final opinions. Two appraisers explicitly mentioned valuating the property “as is,” and one appraiser mentioned valuating the property under the criterion of “undivided ownership interest.” Six appraisers declared to having conducted the sales research and preparing the report themselves, while two reported having used help to complete those activities, and one indicated not having been personally involved in those activities. One appraiser did not disclose the date of the property inspection. Seven appraisal reports included pictures of the farm taken by the appraisers from outside or inside the property, and one included a LiDAR map. While three appraisers mentioned “date adjustment only” under hypothetical assumptions, three others listed “property in same condition on date inspected as on effective date,” one appraiser referred to acre measurements being approximate, and two others listed “none.” In 2019, none of the appraisals listed hypothetical assumptions. The assumed exposure and marketing times varied from 1-3 months to 6-9 months. The average reported net/taxable area for Farm A was 112.48 acres (with a standard deviation of 1.61 acres); and the average reported tillable acres amounted to 105.33 (with a standard deviation of 4.90 acres), characterized by an average CSR2 index of 86.85 (with a standard deviation of 1.35 CSR2 points). One appraiser reported a land quality index value using the first version of the CSR index (excluded from the previous calculations). Importantly, the number of comparative sales or “comps” chosen by the appraisers varied between three and six and included farms in the same county as the subject farm and in neighboring counties. Furthermore, while one appraiser (ID 8) used the same comps for Farms A, B, and C, most appraisers selected a fully different set of comps for Farm A than for Farms B and C (IDs 1, 2, 3, 5, 7, and 9), and others selected a mix of repeated and different comps (IDs 4 and 6). Another difference in the valuation process stems from the value adjustments applied to the comps: while most appraisers considered land quality parameters, others focused on time of sale, ease of access and farming, CRP adjustments, and buyers’ motivation (adjoining property). The use of different comps and value adjustments resulted in different valuations according to the sales comparison approach. For the income method, differences stemmed from the estimated gross income per acre, the estimated expenses included in the calculation and their magnitudes, and the capitalization rates. All appraisers included real estate taxes in the list of expenses, and most included insurance, maintenance, and management expenses. The latter ranged from 4% to 8% of the gross income. The capitalization rates for Farm A in 2019 averaged 2.19%, with a range from 1.79% to 2.65%, and a coefficient of variation of 12.7%.

Finally, five of the appraisers reported contacting the farm owner to request information about the property.

Table 6 highlights the differences in the appraisal procedures followed by appraisers in 2020 with respect to 2019 for Farm A (Appendix Section 2 extends the analysis to Farms B and C). Besides obvious differences in dates, comps, and estimated gross income, other differences included the reported total net/taxable acres (appraiser IDs 4 and 6), number of tillable acres (appraiser IDs 2 and 5), CSR2 rating (appraiser ID 8), exposure and marketing time assumptions (appraiser IDs 4 and 9), and that appraiser ID 1 conducted the sales research and prepared the appraisal report by self in 2020. Capitalization rates used in 2020 were similar to the rates used in 2019, with the average difference across farms and appraisers amounting to -0.01 percentage points. However, while appraiser IDs 2, 4, and 8 used the same or lower capitalization rates in 2020 than in 2019, appraiser IDs 3, 5, 6, 7 used the same or higher capitalization rates in 2020 than in 2019; and appraiser ID 1 used the same rates across years.

## CONCLUSIONS

This exploratory study of actual appraisal processes for three farms by nine CGAs across two years provides insights on the variability of appraised values for each farm and identifies similarities and differences in the appraisal processes implemented by each appraiser. To the best of our knowledge, this is the first study to compare real appraisals of farms across multiple CGAs.

Our findings confirm that despite the norms and regulations that CGAs abide by, the appraisal process is subjective in nature, and the appraised value of a farm in Iowa at a particular point in time can be very different (by as much as 20% of their mean value) across CGAs. Furthermore, the observed discrepancies in basic facts considered by CGAs throughout the appraisal process, such as tillable acres and productivity indexes, were non-trivial.

In practice, institutions have developed multiple mechanisms to mitigate the effects of subjectivity as described in this article. For example, entities considering high-value transactions (including government agencies, venture funds, and businesses) typically obtain multiple appraisals. Furthermore, some entities that regularly deal with appraisal reports in their daily operations (including lenders and developers) usually employ an internal or external

review appraiser (who has completed more training than CGAs) to evaluate whether USPAP rules were followed and clarify any concerns in cooperation with the authors of the appraisal reports. Finally, when competing appraisal reports are presented in court and their valuations differ substantially, the judge might submit the appraisals to a Review Appraisal Committee for expert guidance on the valuation to use.

This article is not intended to discredit the work of highly qualified CGAs but to raise awareness about the complexity of their profession and the convenience of applying caution and discounting appraised values in loan determinations and other instances when the asset might need to be sold at a market price determined by a different appraiser than the author of the original report. It is also more applicable to the land markets in the Midwest than other regions of the country due to the subject farm's location.

## FOOTNOTES

- 1 The Corn Suitability Rating 2 (CSR2) is the potential farmland productivity index used in Iowa. It ranges from 0 to 100, where higher values indicate higher agricultural productivity potential (Burras et al., 2015). The average CSR2 indexes for participating farms ranged between 57 and 88, while the row-crop CSR2 indexes for Washington County and the state of Iowa are, respectively, 82 and 80 (Plastina et al., 2023). The CSR2 index was originally created to equalize tax assessments on agricultural land based on soil types and their inherent properties, it does not incorporate any information on actual soil health or fertility level.

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**Table 1. Appraised Values for Farm A in 2019 and 2020**

Appraiser ID	Sales Comparison Approach	Income Approach	Cost Approach	Final Opinion of Value
<b>Year 2019 (\$ per farm)</b>				
ID 1	1,179,255	1,152,389	n/a	1,165,000
ID 2	1,091,000	1,110,000	1,060,000	1,091,000
ID 3	1,062,000	1,094,000	n/a	1,070,000
ID 4	1,112,000	1,095,000	1,102,000	1,110,000
ID 5	1,164,500	1,208,100	1,158,800	1,178,600
ID 6	1,250,000	1,245,000	1,250,000	1,250,000
ID 7	1,205,659	1,263,200	n/a	1,206,000
ID 8	1,097,500	1,086,500	1,098,000	1,097,500
ID 9	1,055,925	1,108,792	1,056,122	1,055,925
Mean (\$ per farm)	1,135,315	1,151,442	1,120,820	1,136,003
StDev (\$ per farm)	67,545	69,546	73,335	66,617
Range (\$ per farm)	194,075	176,700	193,878	194,075
CoeffVar (%)	5.9%	6.0%	6.5%	5.9%
Range Percent (%)	17.1%	15.3%	17.3%	17.1%
<b>Year 2020 (\$ per farm)</b>				
ID 1	1,212,948	1,142,129	n/a	1,180,000
ID 2	1,067,000	1,050,000	1,067,000	1,067,000
ID 3	1,240,000	1,236,000	n/a	1,240,000
ID 4	1,319,000	1,152,000	1,303,000	1,260,000
ID 5	1,179,300	1,181,500	1,180,900	1,180,400
ID 6	1,193,000	1,208,000	1,211,000	1,200,000
ID 7	1,205,994	1,236,286	n/a	1,206,900
ID 8	1,176,000	1,174,500	1,177,500	1,176,000
ID 9	1,193,400	1,007,500	1,073,980	1,193,400
Mean (\$ per farm)	1,198,516	1,154,213	1,168,897	1,189,300
StDev (\$ per farm)	65,889	79,065	88,732	53,979
Range (\$ per farm)	252,000	228,786	236,000	193,000
CoeffVar (%)	5.5%	6.9%	7.6%	4.5%
Range Percent (%)	21.0%	19.8%	20.2%	16.2%

Notes: StDev=standard deviation; Range=maximum value-minimum value; CoeffVar=StDev / Mean; Range Percent=Range / Mean; n/a: not available.

Farm A had about 100 acres in a corn-soybean rotation and an average CSR2 index of 87.

**Table 2. Appraised Values for Farm B in 2019 and 2020**

Appraiser ID	Sales Comparison Approach	Income Approach	Cost Approach	Final Opinion of Value
<b>Year 2019 (\$ per farm)</b>				
ID 1	569,473	579,767	n/a	575,000
ID 2	528,000	520,000	541,000	528,000
ID 3	510,000	529,000	n/a	515,000
ID 4	538,000	532,000	543,000	538,269
ID 5	541,900	521,300	545,500	535,400
ID 6	515,000	540,000	510,000	525,000
ID 7	491,909	483,522	n/a	492,000
ID 8	483,500	463,000	489,000	483,500
ID 9	492,000	486,110	476,743	492,000
Mean (\$ per farm)	518,865	517,189	517,541	520,463
StDev (\$ per farm)	28,138	35,100	30,054	28,741
Range (\$ per farm)	85,973	116,767	68,757	91,500
CoeffVar (%)	5.4%	6.8%	5.8%	5.5%
Range Percent (%)	16.6%	22.6%	13.3%	17.6%
<b>Year 2020 (\$ per farm)</b>				
ID 1	546,070	575,488	n/a	560,000
ID 2	520,000	497,000	497,000	520,000
ID 3	550,000	550,000	n/a	550,000
ID 4	562,000	550,000	551,000	553,871
ID 5	539,100	532,200	533,000	535,500
ID 6	515,000	527,000	531,000	522,000
ID 7	468,220	469,120	n/a	468,000
ID 8	515,000	493,500	515,500	515,000
ID 9	488,000	506,255	502,310	488,000
Mean (\$ per farm)	522,599	522,285	521,635	523,597
StDev (\$ per farm)	30,420	33,613	20,480	30,676
Range (\$ per farm)	93,780	106,368	54,000	92,000
CoeffVar (%)	5.8%	6.4%	3.9%	5.9%
Range Percent (%)	17.9%	20.4%	10.4%	17.6%

Note: StDev=standard deviation; Range=maximum value-minimum value; CoeffVar=StDev / Mean; Range Percent=Range / Mean; n/a: not available

Farm B had about 70 acres in a corn-soybean rotation and an average CSR2 index of 58.

**Table 3. Appraised values for Farm C in 2019 and 2020**

Appraiser ID	Sales Comparison Approach	Income Approach	Cost Approach	Final Opinion of Value
<b>Year 2019 (\$ per farm)</b>				
ID 1	504,673	521,070	n/a	515,000
ID 2	476,000	476,000	493,000	476,000
ID 3	445,000	459,000	n/a	450,000
ID 4	501,000	504,000	484,000	501,192
ID 5	475,700	475,100	475,600	475,500
ID 6	435,000	465,000	435,000	450,000
ID 7	460,327	445,217	n/a	460,000
ID 8	455,500	445,500	458,000	455,500
ID 9	444,500	450,000	441,620	444,500
Mean (\$ per farm)	466,411	471,210	464,537	469,744
StDev (\$ per farm)	24,799	26,395	23,459	24,556
Range (\$ per farm)	69,673	75,853	58,000	70,500
CoeffVar (%)	5.3%	5.6%	5.1%	5.2%
Range Percent (%)	14.9%	16.1%	12.5%	15.0%
<b>Year 2020 (\$ per farm)</b>				
ID 1	487,270	516,884	n/a	500,000
ID 2	476,000	454,000	453,000	476,000
ID 3	496,000	483,500	n/a	495,000
ID 4	519,000	528,000	522,000	522,075
ID 5	477,500	478,600	464,700	475,500
ID 6	440,000	456,000	452,000	448,000
ID 7	460,327	445,217	n/a	427,000
ID 8	479,500	474,500	483,000	479,500
ID 9	472,500	478,500	456,040	472,500
Mean (\$ per farm)	478,677	479,467	471,790	477,286
StDev (\$ per farm)	22,022	27,772	27,165	27,962
Range (\$ per farm)	79,000	82,783	70,000	95,075
CoeffVar (%)	4.6%	5.8%	5.8%	5.9%
Range Percent (%)	16.5%	17.3%	14.8%	19.9%

Note: StDev=standard deviation; Range=maximum value-minimum value; CoeffVar=StDev / Mean; Range Percent=Range / Mean; n/a: not available.

Farm C had about 65 acres in a corn-soybean rotation and an average CSR2 index of 57.



**Table 4. Linear Correlation between Valuation Approach and Final Value Opinion**

	Sales Comparison Approach	Income Approach	Cost Approach
<b>Year 2019</b>			
Farm A	99%	92%	98%
Farm B	99%	95%	92%
Farm C	97%	94%	85%
<b>Year 2020</b>			
Farm A	95%	52%	78%
Farm B	98%	91%	82%
Farm C	89%	89%	91%
<b>Years 2019–2020</b>			
Farm A	98%	66%	88%
Farm B	98%	93%	87%
Farm C	92%	91%	88%

**Table 5. Comparison of Salient Features of 2019 Appraisal Reports for Farm A**

Items in Report	Appraiser			
	ID 1	ID 2	ID 3	ID 4
Effective Date of Appraisal	4/1/2019	4/1/2019	4/1/2019	4/1/2019
Property Inspected	6/13/2019	n/a	6/3/2019	5/1/2019
Report Signed	6/24/2019	6/22/2019	6/13/2019	7/3/2019
Valuation Approaches	S, I	S, I, C	S, I	S, I, C
Comments to Value	FS, AI	FS, AI	FS	FS
Followed USPAP	Yes	Yes	Yes	Yes
Personal Inspection	Yes	Yes	Yes	Yes
Sales Research & Report Preparation by Self?	No	As team (2)	Yes	Yes
Info Used by Appraiser	AM, SM, P	AM, SM, P, LM	AM, SM	AM, SM, P
Extraordinary Assumptions	None	None	Date adjustment only	Acreage measurements used in the Addendum are approximate
Hypothetical Assumptions	None	None	None	None
Exposure Time (pre-valuation), in Months	3-6	1-3	1-4	6-9
Marketing Time (post-valuation), in Months	3-6	1-3	n/a	6-9
Total Net/Taxable Acres	112.31	111.78	111.78	112.31
Tillable Acres	92.61	111.60	106.73	107.00
CSR2 Rating on Tillable Acres	88.5	87.2	86.1	85.9
Reported Flood Zone	X - low risk	X-minimal flood hazard	n/a	X
Topography Description	Rolling	Rolling, undulating	Gently sloping topography	Surface water drains to the open ditch in the middle from both sides
Number of Comparable Subjects and County	3 Washington, 1 Johnson (All different from comps for B and C)	2 Washington, 1 Keokuk (All different from comps for B and C)	6 Washington (All different from comps for B and C)	2 Washington, 3 Johnson (1 comp same as for B and C)
Value Adjustments to at Least One of the Comparable Properties	CSR2, land mix adj.	CSR2, land mix adj.	Farming ease-internal barriers	Improvements, land quality
Estimated Gross Income per Acre	\$30,188	\$30,953	\$27,000	\$32,170
Estimated Expenses as % of Gross Income	Real estate tax (11.9%) and insurance (0.3%) only.	Real estate tax (11.6%), insurance (0.5%), maintenance (0.5%), and management (5%)	Real estate tax only (13.5%)	Real estate tax (11.2%), insurance (0.6%), and maintenance (3.1%); no management expense
Capitalization Rate	2.30%	2.30%	2.10%	2.50%
Mentioned CRP Encumbrance	Yes	Yes	Yes	Yes
Reported Requesting Information from Owner	No	Yes	Yes	No

Notes: S: Sales valuation approach; I: Income valuation approach; C: Cost valuation approach; FS: fee simple; AI: as is; AM: Aerial maps; SM: Soil maps; P: Pictures taken by appraiser; LM: LiDAR maps; n/a: not available.

**Table 5. Comparison of Salient Features of 2019 Appraisal Reports for Farm A (Continued)**

Items in Report	Appraiser				
	ID 5	ID 6	ID 7	ID 8	ID 9
Effective Date of Appraisal	4/1/2019	4/1/2019	4/1/2019	4/1/2019	4/1/2019
Property Inspected	4/20/2019	4/16/2019	5/28/2019	5/14/2019	5/12/2019
Report Signed	7/10/2019	6/5/2019	6/5/2019	5/28/2019	5/30/2019
Valuation Approaches	S, I, C	S, I, C	S, I	S, I, C	S, I, C
Comments to Value	FS, UOI	FS	FS	FS	FS
Followed USPAP	Yes	Yes	Yes	Yes	Yes
Personal Inspection	Yes	Yes	Yes	Yes	Yes
Sales Research & Report Preparation by Self?	Yes	Yes	Yes	Yes	Yes (with help of others to collect data)
Info used by Appraiser	AM, SM, P	AM, SM, P	AM, SM, P	AM, SM, P	AM, SM
Extraordinary Assumptions	Property in same condition on date inspected as on effective date	Date adjustment only	Property in same condition on date inspected as on effective date	Property in same condition on date inspected as on effective date	Date adjustment only
Hypothetical Assumptions	None	None	None	None	None
Exposure Time (pre-valuation), in Months	3-6	2-4	3	6	n/a
Marketing Time (post-valuation), in Months	n/a	2-4	3	6	2
Total Net/Taxable Acres	111.78	111.80	111.78	111.78	117.00
Tillable Acres	106.73	106.30	106.73	103.53	106.73
CSR2 Rating on Tillable Acres	86.7	86.9	89	84.5	85.9 CSR (previous version)
Reported Flood Zone	X-minimal flood hazard	X-minimal flood hazard	n/a	Minimum flood potential	No flood zone
Topography Description	From nearly level to gently sloping to moderately sloping	Mostly level with a slight slope to the creek. The slopes range from 0% to 9%	Ranges from nearly level to rolling	From nearly level to gently rolling	Level to gently rolling with waterways
Number of Comparable Subjects and County	3 Washington, 2 Keokuk (all different from comps for B and C)	1 Washington, 3 Keokuk (1 comp same as for B and C)	2 Washington, 3 Keokuk (all different from comps for B and C)	5 Washington (Same comps for 3 farms)	4 Washington (all different from comps for B and C)
Value Adjustments to at Least One of the Comparable Properties	Flood zone, CSR2, other (time of sale), farming ease-internal barriers, location, tillable adj., CRP adj.	Time of sale, land quality, motivation (adjoining)	Time of sale, land mix adj., efficiency	Time of sale, improvements, land quality	Time of sale, location & access, land quality, tillable adj., term adj.
Estimated Gross Income per Acre	\$30,381	\$29,523	\$32,077	\$31,981	\$34,389
Estimated Expenses as % of Gross Income	Real estate tax (11.8%), insurance (0.7%), maintenance (6%), and management (8%)	Real estate tax (12.1%), insurance (0.5%), maintenance (3.8%), and management (8%)	Real estate tax (11.2%), insurance (0.3%), maintenance (1.7%), and management (8%)	Real estate tax (11.2%), insurance (0.9%), maintenance (1.7%), and management (8%)	Real estate tax (10.4%), insurance (0.2%), and management (4%); no maintenance expense
Capitalization Rate	1.80%	1.79%	2.00%	2.30%	2.65%
Mentioned CRP Encumbrance	Yes	Yes	Yes	Yes	Yes
Reported Requesting Information from owner	Yes	Yes	No	Yes	No

Notes: S: Sales valuation approach; I: Income valuation approach; C: Cost valuation approach; FS: fee simple; AI: as is; AM: Aerial maps; SM: Soil maps; P: Pictures taken by appraiser; LM: LiDAR maps; n/a: not available.

**Table 6. Differences in Appraisal Reports between 2020 and 2019 for Farm A**

Items in Report	Appraiser			
	ID 1	ID 2	ID 3	ID 4
Effective Date of Appraisal	4/1/2020	4/1/2020	4/1/2020	4/1/2020
Property Inspected	6/26/2020	n/a	6/3/2019	5/29/2020
Report Signed	9/1/2020	6/12/2020	6/10/2020	6/4/2020
Sales Research & Report Preparation by Self?	Yes	As team (2)	Yes	Yes
Extraordinary Assumptions	None	None	Date adjustment only	Acreage measurements used in the Addendum are approximate
Sales Research & Report Preparation by Self?	Yes	As team (2)	Yes	Yes
Exposure Time (pre-valuation), in Months	3-6	1-3	1-4	6-12
Marketing Time (post-valuation), in Months	3-6	1-3	n/a	6-12
Total Net/Taxable Acres	112.31	111.78	111.78	111.78
Tillable Acres	92.61	101.42	106.73	106.47
Number of Comparable Subjects and County	1 Washington, 2 Johnson (all different from comps B and C)	2 Washington, 3 Johnson (all different from comps for B and C)	5 Washington (same as comps for C, 1 different from comps for B)	5 Washington (all different from comps for B and C)
Value adjustments:	CSR2, land mix adj.	Time of sale, land mix adj., changing market conditions	Access to field, farming ease-internal barriers, drainage	Tract size, improvements, land quality
Estimated Gross Income per Acre	\$30,188	\$28,398	\$32,154	\$29,845
Estimated Expenses as % of Gross Income	Real estate tax (12.6%), insurance (0.3%), no maintenance or management charge	Real estate tax (12.6%), insurance (0.5%), maintenance (0.5%), management (5%)	Real estate tax only (11.6%)	Real estate tax (12.4%), insurance (0.7%), and maintenance (2%); no management expense
Capitalization Rate	2.30%	2.20%	2.30%	2.20%

Notes: n/a: not available.

^ The Washington Co. Courthouse was shut down for a few months before the date of the appraisal and no direct search could be made of their records and data.

\* Very few sales in the area, impossibility to access records due to COVID-19. Instead of using a comparison grid, the appraiser proved occurrence of sale and discussed adjustments in a narrative form.

**Table 6. Differences in Appraisal Reports between 2020 and 2019 for Farm A (Continued)**

Items in report	Appraiser				
	ID 5	ID 6	ID 7	ID 8	ID 9
Effective Date of Appraisal	4/1/2020	4/3/2020	4/1/2020	4/1/2020	4/1/2020
Property Inspected	4/30/2020	4/3/2020	5/12/2020	5/22/2020	4/17/2020
Report Signed	6/26/2020	5/8/2020	5/22/2020	6/3/2020	6/8/2020
Sales Research & Report Preparation by Self?	Yes	Yes	Yes	Yes	Yes (with help of others to collect data)
Extraordinary Assumptions	Property in same condition on date inspected as on effective date	Date adjustment only	Property in same condition on date inspected as on effective date. Market not impacted significantly by COVID.	Property in same condition on date inspected as on effective date. No direct record searches. <sup>^</sup>	Departure provision: did not include a comparison grid for comparable sales approach.*
Sales Research & Report Preparation by Self?	Yes	Yes	Yes	Yes	Yes (with help of others to collect data)
Exposure Time (pre-valuation), in Months	6-12	2-4	3	6	n/a
Marketing Time (post-valuation), in Months	n/a	2-4	3	6	3
Total Net/Taxable Acres	111.78	111.78	111.78	111.78	117
Tillable Acres	106.11	106.28	106.73	103.53	106.73
Number of Comparable Subjects and County	3 Washington, 2 Keokuk (all different from comps for B and C)	3 Washington, 1 Keokuk (all different from comps for B and C)	2 Washington, 3 Keokuk (all different comps from B and C)	5 Washington (same comps for 3 farms)	4 Washington, no comparison grid (same comps for 3 farms)
Value Adjustments:	Flood Zone, CSR2, farming ease-internal barriers, tillable adj., soil quality adj., CRP Adj	Land quality, motivation (adjoining)	Time of sale, land mix adj., efficiency	Land quality	Not applicable
Estimated Gross Income per Acre	\$30,207	\$29,333	\$33,004	\$32,691	\$32,806
Estimated Expenses as % of Gross Income	Real estate tax (12.4%), insurance (0.7%), maintenance (6.6%), and management (8%)	Real estate tax (12.7%), insurance (0.5%), maintenance (3.8%), and management (8%)	Real estate tax (11.3%), insurance (0.3%), maintenance (1.7%), and management (8%)	Real estate tax (11.4%), insurance (0.9%), maintenance (1.7%), and management (8%)	Real estate tax (11.4%), insurance (0.2%), management (4%); no maintenance expense
Capitalization Rate	1.80%	1.82%	2.10%	2.17%	2.75%

Notes: n/a: not available.

<sup>^</sup> The Washington Co. Courthouse was shut down for a few months before the date of the appraisal and no direct search could be made of their records and data.

\* Very few sales in the area, impossibility to access records due to COVID-19. Instead of using a comparison grid, the appraiser proved occurrence of sale and discussed adjustments in a narrative form.

## APPENDIX

### Section 1. Comparison of 2019 appraisal reports for Farms B and C.

Tables A1 and A2 in this appendix compare the variables of interest from the nine appraisal reports completed in 2019 for Farms B and C, respectively. Both tables illustrate in detail a number of similarities and differences in the information considered by appraisers during the appraisal process to produce the final opinion value. While some procedural characteristics of the appraisal process followed by each appraiser tend to be the same for the three farms (such as the sources of information and assumptions), farm-specific characteristics and comps, estimated gross incomes, and capitalization rates are key to tailoring the appraised value to a specific farm. Given the similarities between Farms B and C (size, location, CSR2, etc.), eight appraisers used the same comps, and seven used the same capitalization rate for both farms. The variability in the capitalization rates used by each appraiser across farms was substantially smaller than the variability in the capitalization rate used for each farm across appraisers (coefficient of variations between 13.3% and 14.1%). The only exception was appraiser ID 6, whose capitalization rate coefficient of variation amounted to 20.1%. Appraiser ID 5, on the other extreme, used the same capitalization rates for the three farms.

### Section 2. Comparison of appraisal reports across years for Farms B and C.

Tables A3 and A4 highlight the differences in the appraisal procedures followed by appraisers in 2020 with respect to 2019 for Farms B and C. Besides obvious differences in dates, comps, and estimated gross income, other differences included the reported total net/taxable acres (appraiser ID 6 for Farm C), number of tillable acres (appraiser ID 6 for Farm C), CSR2 rating (appraiser ID 9 for Farm B, and appraiser ID 3 for Farm C), exposure and marketing time assumptions (appraiser IDs 4 and 9), and that appraiser ID 1 conducted the sales research and prepared the appraisal report by self in 2020. Capitalization rates used in 2020 were similar to the rates used in 2019, with the average difference across farms and appraisers amounting to -0.01 percentage points. However, while appraiser IDs 2, 4, and 8 used the same or lower capitalization rates in 2020 than in 2019, appraiser IDs 3, 5, 6, 7 used the same or higher capitalization rates in 2020 than in 2019; appraiser ID 1 used exactly the same rates across years, and appraiser ID 9 used a lower rate for Farm A, the same rate for Farm B, and a lower rate for Farm C.

**Table A1. Comparison of Salient Features of 2019 Appraisal Reports for Farm B**

Items in Report	Appraiser								
	ID 1	ID 2	ID 3	ID 4	ID 5	ID 6	ID 7	ID 8	ID 9
Effective Date of Appraisal	4/1/2019	4/1/2019	4/1/2019	4/1/2019	4/1/2019	4/1/2019	4/1/2019	4/1/2019	4/1/2019
Property Inspected	6/13/2019	n/a	6/3/2019	5/1/2019	4/20/2019	4/16/2019	5/28/2019	5/14/2019	5/8/2019
Report Signed	6/24/2019	6/29/2019	6/13/2019	7/7/2019	7/10/2019	6/5/2019	6/5/2019	5/28/2019	5/30/2019
Valuation Approaches	S, I	S, I, C	S, I	S, I, C	S, I, C	S, I, C	S, I	S, I, C	S, I, C
Comments to Value	FS, AI	FS, AI	FS	FS	FS, UOI	FS	FS	FS	FS
Followed USPAP	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Personal Inspection	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Sales Research & Report Preparation by Self?	No	As team (2)	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Info Used by Appraiser	AM, SM, P	AM, SM, P, LM	AM, SM	AM, SM, P	AM, SM, P	AM, SM, P	AM, SM, P	AM, SM, P	AM, SM, P
Extraordinary Assumptions	Date adjustment only	None	Date adjustment only	Property in same condition on date inspected as on effective date	Property in same condition on date inspected as on effective date	Date adjustment only	Property in same condition on date inspected as on effective date	Property in same condition on date inspected as on effective date	Date adjustment only
Hypothetical Assumptions	None	None	None	None	None	None	None	None	None
Exposure Time (pre-valuation)	3-6 months	1-3months	1-4 months	6-9 months	6-12 months	2-4 months	3 months	6 months	n/a
Marketing Time (post-valuation)	3-6 months	1-3 months	n/a	6-9 months	n/a	2-4 months	3 months	6 months	3 months
Total Net/Taxable Acres	78.01	78.18	78.18	78.01	78.18	78.20	78.18	78.18	80.00
Tillable Acres	71.28	71.47	72.00	74.00	74.40	74.40	72.16	72.16	74.40
CSR2 Rating on Tillable Acres	58.3	57.6	57.9	56.9	56.7	57.6	58	49.7	56.6 CSR (previous version)
Reported Flood Zone	X - low risk	X-minimal flood hazard	n/a	X	Not in flood hazard area according to Agridata. Also discussed with operator	X-minimal flood hazard	n/a	X	No flood zone

**Table A1. Comparison of Salient Features of 2019 Appraisal Reports for Farm B (Continued)**

Items in Report	Appraiser								
	ID 1	ID 2	ID 3	ID 4	ID 5	ID 6	ID 7	ID 8	ID 9
Number of Comparable Subjects and County	1 Washington Co., 2 Keokuk Co. (Same comps as for farm C)	1 Washington Co., 4 Keokuk Co. (Same comps as for C)	5 Washington Co. (Same comps as for C)	4 Washington Co., 1 Johnson Co. (Same comps as for B)	4 Washington Co., 1 Keokuk Co. (Same comps as for C)	4 Washington Co. (Same comps as for C)	2 Washington Co., 1 Keokuk Co., 1 Johnson Co., 1 Iowa Co. (Same comps as for C)	5 Washington Co. (Same comps for 3 farms)	4 Washington Co. (All comps different from A and C)
Value Adjustments:	CSR2, time of sale, land mix adj.	CSR2, land mix adj.	Farming ease-internal barriers	Land quality	CSR2, time of sale, farming ease-internal barriers, location, tillable adj.	Time of sale, land quality, motivation (adjoining)	Time of sale, land mix adj., efficiency	Time of sale, improvements, land quality	Time of sale, location & access, land quality
Estimated Gross Income per Acre	\$14,256	\$14,294	\$13,320	\$17,760	\$13,710	\$18,100	\$14,432	\$13,226	\$16,000
Estimated Expenses as % of Gross Income	Real estate tax (11.8%) and insurance (0.7%) only.	Real estate tax (11.8%), insurance (0.7%), maintenance (0.7%), and management (5%)	Real estate tax only (12.7%)	Real estate tax (9.6%), insurance (1.1%), and maintenance (8.4%); no management expense	Real estate tax (12.3%), insurance (1.5%), maintenance (6%), and management (8%)	Real estate tax (9.3%), insurance (0.6%), maintenance (4.3%), and management (8%)	Real estate tax (11.7%), insurance (0.6%), maintenance (2.7%), and management (8%)	Real estate tax (11.3%), insurance (2.3%), maintenance (2.6%), and management (8%)	Real estate tax (10.5%), insurance (0.2%), and management (4%); no maintenance expense
Capitalization Rate	2.15%	2.25%	2.10%	2.70%	1.80%	2.60%	2.30%	2.25%	2.75%
Reported Requesting Information from Owner	No	Yes	Yes	No	Yes	Yes	No	Yes	No

Notes: S: Sales valuation approach; I: Income valuation approach; C: Cost valuation approach; FS: fee simple; AI: as is; AM: Aerial maps; SM: Soil maps; P: Pictures taken by appraiser; LM: LiDAR maps; n/a: not available.



**Table A2. Comparison of Salient Features of 2019 Appraisal Reports for Farm C**

Items in Report	Appraiser								
	ID 1	ID 2	ID 3	ID 4	ID 5	ID 6	ID 7	ID 8	ID 9
Effective Date of Appraisal	4/1/2019	4/1/2019	4/1/2019	4/1/2019	4/1/2019	4/1/2019	4/1/2019	4/1/2019	4/1/2019
Property Inspected	6/13/2019	n/a	6/3/2019	5/1/2019	4/20/2019	4/16/2019	5/28/2019	5/14/2019	5/8/2019
Report Signed	6/24/2019	6/28/2019	6/13/2019	7/3/2019	7/10/2019	6/5/2019	6/5/2019	5/28/2019	5/30/2019
Valuation Approaches	S, I	S, I, C	S, I	S, I, C	S, I, C	S, I, C	S, I	S, I, C	S, I, C
Comments to Value	FS, AI	FS, AI	FS	FS	FS, UOI	FS	FS	FS	FS
Followed USPAP	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Personal Inspection	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Sales Research & Report Preparation by Self?	No	As team (2)	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Info used by Appraiser	AM, SM, P	AM, SM, P, LM	AM, SM	AM, SM, P	AM, SM, P	AM, SM, P	AM, SM, P	AM, SM, P	AM, SM, P
Extraordinary Assumptions	None	None	Date adjustment only	Acreage measurements used in the Addendum are approximate	Property in same condition on date inspected as on effective date	Date adjustment only	Property in same condition on date inspected as on effective date (p.3)	Property in same condition on date inspected as on effective date	Date adjustment only
Hypothetical Assumptions	None	None	None	None	None	None	None	None	None
Exposure Time (pre-valuation)	3-6 months	1-3 months	1-4 months	6-9 months	6-12 months	2-4 months	3 months	6 months	n/a
Marketing Time (post-valuation)	3-6 months	1-3 months	n/a	6-9 months	n/a	2-4 months	3 months	6 months	3 months
Total Net/Taxable Acres	69.61	70.00	69.41	69.61	69.41	69.40	69.41	69.41	70.00
Tillable Acres	64.04	65.17	65.00	68.00	66.40	65.70	66.05	64.74	66.00
CSR2 Rating on Tillable Acres	57.4	57.2	56.1	56.4	57.8	57.9	58	51.6	55.7 CSR (previous version)
Reported Flood Zone	X - low risk	X-minimal flood hazard	n/a	X	X-minimal flood hazard	X-minimal flood hazard	n/a	Minimum flood potential	No flood zone
Topography Description	Rolling	Rolling	Nearly level to moderately sloping	The 2 south fields are classified as HEL due to slope	From gently sloping to moderately steep	Mostly level on the southeast and northwest sloping to the creek that runs across the farm. The slopes range from 0% to 14%.	Ranges from rolling to strongly rolling	Nearly level to rolling	Gentle to strongly rolling side slopes off of ridge tops

**Table A2. Comparison of Salient Features of 2019 Appraisal Reports for Farm C (Continued)**

Items in Report	Appraiser								
	ID 1	ID 2	ID 3	ID 4	ID 5	ID 6	ID 7	ID 8	ID 9
Number of Comparable Subjects and County	1 Washington Co., 2 Keokuk Co. (same comps as for farm B)	1 Washington Co., 4 Keokuk Co. (same comps as for B)	5 Washington Co. (same comps as for B)	4 Washington Co., 1 Johnson Co. (same comps as for B)	4 Washington Co., 1 Keokuk Co. (all same as for farm B)	4 Washington Co. (all same comps as for C)	2 Washington Co., 1 Keokuk Co., 1 Johnson Co., 1 Iowa Co. (same comps as for B)	5 Washington Co. (same comps for 3 farms)	4 Washington Co. (all comps different from A and B)
Value Adjustments:	CSR2, time of sale, land mix adj.	CSR2, land mix adj.	Farming ease-internal barriers	Land quality	CSR2, time of sale, farming ease-internal barriers, tillable adj.	Time of sale, land quality, motivation (adjoining)	Time of sale, land mix adj., efficiency	Time of sale, improvements, land quality	Tract size, time of sale, land quality, tillable adj.
Estimated Gross Income per Acre	\$12,808	\$13,047	\$11,700	\$16,320	\$12,473	\$15,673	\$13,210	\$13,865	\$15,180
Estimated Expenses as % of Gross Income	Real estate tax (11.7%) and insurance (0.8%) only.	Real estate tax (11.5%), insurance (0.7%), maintenance (0.7%), and management (5%)	Real estate tax only (13.7%)	Real estate tax (9.2%), insurance (1.2%), and maintenance (6.1%); no management expense	Real estate tax (12%), insurance (1.6%), maintenance (6%), and management (8%)	Real estate tax (9.6%), insurance (0.5%), maintenance (4.4%), and management (8%)	Real estate tax (11.4%), insurance (0.5%), maintenance (2.6%), and management (8%)	Real estate tax (12.2%), insurance (1.8%), maintenance (2.9%), and management (8%)	Real estate tax (9.9%), insurance (0.2%), and management (4%); no maintenance expense
Capitalization Rate	2.15%	2.25%	2.20%	2.70%	1.80%	2.60%	2.30%	2.25%	2.90%
Reported Requesting Information from Owner	No	Yes	Yes	No	Yes	Yes	No	Yes	No

Notes: S: Sales valuation approach; I: Income valuation approach; C: Cost valuation approach; FS: fee simple; AI: as is; AM: Aerial maps; SM: Soil maps; P: Pictures taken by appraiser; LM: LiDAR maps; n/a: not available.

**Table A3. Differences in Appraisal Reports between 2020 and 2019 for Farm B**

Items in Report	Appraiser								
	ID 1	ID 2	ID 3	ID 4	ID 5	ID 6	ID 7	ID 8	ID 9
Effective Date of Appraisal	4/1/2020	4/1/2020	4/1/2020	4/1/2020	4/1/2020	4/3/2020	4/1/2020	4/1/2020	4/1/2020
Property Inspected	6/26/2020	n/a	6/3/2019	5/29/2020	4/30/2020	4/3/2020	5/12/2020	5/22/2020	4/17/2020
Report Signed	9/1/2020	6/17/2020	6/6/2020	6/9/2020	6/26/2020	5/8/2020	5/22/2020	6/3/2020	6/10/2020
Sales Research & Report Preparation by Self?	Yes	As team (2)	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Extraordinary Assumptions	None	None	Date adjustment only	Property in same condition on date inspected as on effective date	Property in same condition on date inspected as on effective date	Date adjustment only	Property in same condition on date inspected as on effective date. Market not impacted significantly by COVID.	Property in same condition on date inspected as on effective date. No direct record searches. <sup>^</sup>	Departure provision: did not include a comparison grid for comparable sales approach.*
Sales Research & Report Preparation by Self?	Yes	As team (2)	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Exposure Time (pre-valuation)	3-6 months	1-3months	1-4 months	6-12 months	6-12 months	2-4 months	3 months	6 months	n/a
Marketing Time (post-valuation)	3-6 months	1-3 months	n/a	6-12 months	n/a	2-4 months	3 months	6 months	2-3 months
Total Net/Taxable Acres	78.01	78.18	78.18	78.01	78.18	78.20	78.18	78.18	80.00
Tillable Acres	71.28	71.47	72.00	74.00	74.40	74.40	72.16	72.16	74.40
Number of Comparable Subjects and County	2 Washington Co., 1 Keokuk Co. (same comps as for C)	2 Keokuk Co., 3 Iowa Co. (same comps as for C)	5 Washington Co. (4 comps same as for A and C)	3 Washington Co., 1 Keokuk Co., 1 Johnson Co. (4 same as comps for C)	2 Washington Co., 3 Keokuk Co. (same comps as for C)	2 Washington Co., 1 Keokuk Co., 1 Iowa Co. (2 same comps as for C)	2 Washington Co., 1 Keokuk Co., 1 Johnson Co., 1 Iowa Co. (same comps as for C)	5 Washington Co. (same comps for 3 farms)	4 Washington Co., no comparison grid (same comps for 3 farms)
Value Adjustments to at Least One of the Comparable Properties:	CSR2, land mix adj.	Land mix adj.	Access to field, farming ease-internal barriers, drainage	Land quality	Flood Zone, CSR2 <sup>^</sup> , Other (farming ease-internal barriers), other (improvements), tillable adjustment	Land quality, motivation (adjoining)	Time of sale, land mix adj., efficiency	Land quality	Not applicable
Gross Income per Acre	\$14,256	\$13,222	\$14,400	\$17,750	\$13,710	\$17,695	\$15,154	\$13,865	\$15,360
Estimated Expenses for Income Approach as % of Gross Income	Real estate tax (12.5%), and insurance (0.7%) only	Real estate tax (13.2%), insurance (1.4%), maintenance (1.4%), and management (5%)	Real estate tax only (12.1%)	Real estate tax (9.9%), insurance (1.1%), and maintenance (8.5%); no management expense	Real estate tax (12.7%), insurance (1.5%), maintenance (6%), and management (8%)	Real estate tax (9.5%), insurance (0.6%), maintenance (4.4%), and management (8%)	Real estate tax (11.5%), insurance (0.5%), maintenance (2.6%), and management (8%)	Real estate tax (12.6%), insurance (1.8%), maintenance (2.9%), and management (8%)	Real estate tax (10.1%), insurance (0.2%), and management (4%); no maintenance expense
Capitalization Rate in Income Approach to Value	2.15%	2.10%	2.30%	2.60%	1.85%	2.60%	2.50%	2.10%	2.75%

Notes: n/a: not available.

<sup>^</sup> The Washington Co. Courthouse was shut down for a few months before the date of the appraisal and no direct search could be made of their records and data.

\* Very few sales in the area, impossibility to access records due to COVID-19. Instead of using a comparison grid, the appraiser proved occurrence of sale and discussed adjustments in a narrative form.

**Table A4. Differences in Appraisal Reports between 2020 and 2019 for Farm C**

Items in Report	Appraiser								
	ID 1	ID 2	ID 3	ID 4	ID 5	ID 6	ID 7	ID 8	ID 9
Property Inspected	6/26/2020	n/a	6/3/2019	5/28/2020	4/30/2020	4/3/2020	5/12/2020	5/22/2020	4/17/2020
Report Signed	9/1/2020	6/13/2020	6/5/2020	6/5/2020	6/24/2020	5/8/2020	5/22/2020	6/3/2020	6/10/2020
Sales Research & Report Preparation by Self?	Yes	As team (2)	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Extraordinary Assumptions	None	None	Date adjustment only	Acreage measurements used in the Addendum are approximate	Property in same condition on date inspected as on effective date	Date adjustment only	Property in same condition on date inspected as on effective date. Market not impacted significantly by COVID.	Property in same condition on date inspected as on effective date. No direct record searches. <sup>^</sup>	Departure provision: did not include a comparison grid for comparable sales approach.*
Sales Research & Report Preparation by Self?	Yes	As team (2)	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Exposure Time (pre-valuation)	3-6 months	1-3 months	1-4 months	6-12 months	6-12 months	2-4 months	3 months	6 months	n/a
Marketing Time (post-valuation)	3-6 months	1-3 months	n/a	6-12 months	n/a	2-4 months	3 months	6 months	2-3 months
Total Net/Taxable Acres	69.61	70.00	69.41	69.61	69.41	69.41	69.41	69.41	70.00
Tillable Acres	64.04	65.17	65.00	68.00	66.40	65.71	66.05	64.74	66.00
Number of Comparable Subjects and County	2 Washington Co., 1 Keokuk Co. (same comps as for B)	2 Keokuk Co., 3 Iowa Co. (same comps as for B)	5 Washington Co. (all same as comps for A, 1 different from comps for B)	3 Washington Co., 2 Johnson Co. (4 same as comps for B)	2 Washington Co., 3 Keokuk Co. (same comps as for B)	2 Washington Co., 1 Keokuk Co., 1 Iowa Co. (2 same comps as for B)	2 Washington Co., 1 Keokuk Co., 1 Johnson Co., 1 Iowa Co. (same comps as for B)	5 Washington Co. (same comps for 3 farms)	4 Washington Co., no comparison grid (same comps for 3 farms)
Value Adjustments to at Least One of the Comparable Properties:	CSR2, land mix adj.	Land mix adj.	Access to field, farming ease-internal barriers	Land quality	Flood Zone, time of sale, farming ease-internal barriers, tillable adj., soil quality adj.	Land quality, motivation (adjoining)	Time of sale, land mix adj., efficiency	Land quality	Not applicable
Gross Income per Acre	\$12,808	\$12,056	\$12,675	\$17,000	\$12,473	\$15,370	\$13,871	\$13,226	\$16,368
Estimated Expenses for Income Approach as % of Gross Income	Real estate tax (12.4%) and insurance (0.8%) only	Real estate tax (12.9%), insurance (1.5%), maintenance (1.5%), and management (5%)	Real estate tax only (12.3%)	Real estate tax (9.1%), insurance (1.2%), and maintenance (5.9%); no management expense	Real estate tax (12.5%), insurance (1.6%), maintenance (6%), and management (8%)	Real estate tax (9.8%), insurance (0.7%), maintenance (4.5%), and management (8%)	Real estate tax (11.2%), insurance (0.5%), maintenance (2.5%), and management (8%)	Real estate tax (11.7%), insurance (2.3%), maintenance (2.6%), and management (8%)	Real estate tax (10.7%), insurance (0.2%), and management (4%); no maintenance expense
Capitalization Rate in Income Approach to Value	2.15%	2.10%	2.30%	2.70%	1.80%	2.60%	2.50%	2.10%	2.75%

Notes: n/a: not available.

<sup>^</sup> The Washington Co. Courthouse was shut down for a few months before the date of the appraisal and no direct search could be made of their records and data.

\* Very few sales in the area, impossibility to access records due to COVID-19. Instead of using a comparison grid, the appraiser proved occurrence of sale and discussed adjustments in a narrative form.