701—102.12(441) Determination of aggregate actual values.

102.12(1) Agricultural real estate.

- a. Use of income capitalization study. The equalized valuation of agricultural realty shall be based upon its productivity and net earning capacity and shall be determined in accordance with the provisions of this subrule. Data used shall pertain to crops harvested during the five-year period ending with the calendar year in which assessments were last equalized. The equalized valuation of agricultural realty shall be determined for each county as follows:
- (1) Computation of county acres. This information shall be obtained from the USDA National Agricultural Statistics Service.
 - 1. Total acres in farms: Total acreage used for agricultural purposes.
- 2. Corn acres: Sum of corn acres harvested including silage, popcorn and acres planted for sorghum.
 - 3. Oats and wheat acres: Sum of oats and wheat acres harvested.
 - 4. Soybean acres: Soybean acres harvested.
 - 5. Hay acres: All hay acres harvested.
- 6. Pasture acres: All pasture acres. Total pasture acres shall be determined by multiplying the total acres in farms reported by the USDA National Agricultural Statistics Service by the percentage which total pasture land as reported in the most recent U.S. Census of Agriculture bears to the total acreage in farmland also reported in the most recent U.S. Census of Agriculture. The amount of tillable and nontillable pasture acres shall be determined as follows:

1.	From the most recent U.S. Census of Agriculture obtain the following:	
	Cropland used only for pasture and grazing	 acres
	Woodland pasture	 acres
	Pasture land and rangeland (other than cropland and woodland pasture)	 acres
	TOTAL PASTURE LAND (total of above):	 acres
2.	Determine what percentage of the total pasture land is cropland used only for pasture:	 %
3.	Apply the percentage in "2" above to the 5-year average total acres of pasture as determined above to determine the pasture acres to be classified as tillable pasture. The remainder of the 5-year average shall be classified as nontillable pasture land.	 acres

- 7. Government programs: Determine the 5-year average acres participating in applicable government programs. Obtain data from the USDA Farm Service Agency, including but not limited to acreage devoted to the Payment-In-Kind (PIK), diverted and deficiency programs.
- 8. Other acres: The difference between the total acreage for land uses listed above and the total of all land in farms. Add the total of the corn, oats, soybeans, hay, tillable and nontillable pasture and diverted acres. Subtract this total from total acres in farms. The residual is classified as other acres.
- (2) Computation of county yields. This information shall be obtained for each county from the USDA National Agricultural Statistics Service.
 - 1. Corn yield (including silage): Number of bushels of corn harvested for grain per acre.
 - 2. Oat yield (including wheat): Number of bushels of oats harvested per acre.
 - 3. Soybean yield: Number of bushels per acre harvested.
 - 4. Hay yield in tons: Number of tons per acre harvested.
 - (3) Computation of county gross income.

1. Corn: One-half of the 5-year average production multiplied by the 5-year average price received for corn.

- 2. Silage: One-half of the 5-year average number of acres devoted to the production of silage multiplied by the 5-year average production per acre for corn. The amount of production so determined shall be added to the 5-year average production for corn and included in the determination of the gross income for corn.
- 3. Soybeans: One-half of the 5-year average production multiplied by the 5-year average price received.
- 4. Oats: One-half of the 5-year average production of oats and wheat multiplied by the 5-year average price received for oats.
- 5. Price adjustment: For corn, soybeans, hay, and oats, the prices used shall be as obtained from the USDA National Agricultural Statistics Service and shall be adjusted to reflect any individual county price conditions prior to the 2007 crop year. For the 2007 crop year and later, the USDA National Agricultural Statistics Service district prices shall be used and shall be adjusted to reflect any individual county price conditions.
- 6. Government programs: Gross income shall be one-half of the 5-year average amount of cash payments or equivalent (such as PIK bushels) including but not limited to diverted, deficiency and PIK programs as reported by the USDA Farm Service Agency.
- 7. Hay: Gross income shall be a cash rent amount determined by multiplying the 5-year average number of acres devoted to hay by the product obtained by multiplying one-fourth of the 5-year average hay yield by the 5-year average price received for all types of hay.
- 8. Tillable pasture: Gross income shall be a cash rent amount determined by multiplying the 5-year average number of acres devoted to tillable pasture by the product obtained in "hay" above.
- 9. Nontillable pasture: Gross income shall be a cash rent amount determined by multiplying the 5-year average number of acres devoted to nontillable pasture by one-half the product obtained in "hay" above.
- 10. Other acres: Income shall be the product of the number of other acres multiplied by 17 percent of the net income per acre for all other land uses.
- (4) Computation of county production costs. The following data and procedures shall be used to determine specific county production costs.
- 1. Basic average landlord production costs. Landlord production costs for corn, soybeans, oats, diverted acres, hay, tillable pasture, nontillable pasture, fertilizer costs, and facilities' costs shall be obtained for each year from Iowa State University.
- 2. Production cost adjustment. The production costs for corn, soybeans, oats, and hay are adjusted for each county by multiplying the difference between the 5-year state average yield per acre and the 5-year county average yield per acre by the 5-year average facilities' costs. If a county's yield exceeds the state yield, production costs are increased by this amount. If a county's yield is less than the state yield, production costs are reduced by this amount.
- 3. Fertilizer cost adjustment. The adjustment for fertilizer costs is determined as follows: Multiply the difference between the 5-year state average corn yield per acre and the 5-year county average corn yield per acre obtained from the USDA National Agricultural Statistics Service by the fertilizer cost amount per bushel determined by dividing the statewide average cost of landlord's share of fertilizer cost per acre from Iowa State University by the statewide average corn yield per acre to produce the corn fertilizer cost per bushel adjustment. This amount is then multiplied by the 5-year county average corn acres determined in (2) above.
- 4. Expense adjustments. If a county's 5-year average corn yield is greater than the state 5-year average corn yield, this amount is allowed as an additional expense. If the county's average is less than the state average, this amount is an expense reduction.
- 5. Liability insurance cost adjustment. The 5-year average per acre cost of obtaining tort liability insurance shall be determined.
- (5) Computation of county net income. From the total gross income, subtract the total expenses. Divide the resulting total by the total number of acres.

(6) Computation of dwelling adjustment factor. The amount determined in (5) above shall be reduced by 10.6 percent.

- (7) Computation of county tax adjustment. Subtract the 5-year average per acre real estate taxes levied for land and structures including drainage and levee district taxes but excluding those levied against agricultural dwellings from the amount determined in (6) above. Taxes shall be the tax levied for collection during the 5-year period as reported by county auditors, and reduced by the amount of the agricultural land tax credit.
- (8) Calculation of county valuation per acre. Divide the net income per acre ((7) above) for each county as determined above by the capitalization rate specified in Iowa Code section 441.21. The quotient shall be the actual per acre equalized valuation of agricultural land and structures for the current equalization year.
- b. Use of other relevant data. The department of revenue may also consider other relevant data, including field investigations conducted by representatives of the department, to determine the level of assessment of agricultural real estate.
- c. Determination of value. The aggregate actual value of agricultural real estate in each county shall be determined by multiplying the equalized per acre value by the number of acres of agricultural real estate reported on the abstract of assessment for the current year, adjusted where necessary by the results of any field investigations conducted by the department of revenue and any other relevant data available.

102.12(2) Residential real estate outside and within incorporated cities.

- a. Use of assessment/sales ratio study.
- (1) Basic data shall be that set forth in rule 701—102.10(421) refined by eliminating any sales determined to be abnormal or by adjusting the sales to eliminate the effects of factors that resulted in the determination that the sales were abnormal. The basic data used shall be the assessment/sales ratio study conducted for sales taking place during the calendar year immediately preceding the year in which the equalization order is issued. The department of revenue may also supplement the assessment/sales ratio study with appraisals made by department appraisal personnel for the year immediately preceding the year in which the equalization order is issued. The assessment/sales ratio study including relevant appraisals, if any, shall be used to determine the aggregate actual valuation of residential real estate in each assessing jurisdiction. The department may consider sales and appraisal data for prior years if it is determined the use of the sales and appraisal data for the year immediately preceding the year in which the equalization order is issued is insufficient to determine market value. If such sales and appraisal data for prior years is used, consideration shall be given for any subsequent changes in either assessed value or market value.
- (2) Assessors shall provide any known facts or circumstances regarding reported sales transactions and department appraisals that would indicate abnormal or unusual conditions or reporting discrepancies that would necessitate exclusion or adjustment of sales or appraisals from the determination of aggregate actual values. Assessors shall provide those facts within 45 days of receipt from the department of information concerning sales and appraisal data proposed for assessment/sales ratio and equalization purposes.
- b. Use of other relevant data. The department of revenue may also consider other relevant data, including field investigations conducted by representatives of the department, to determine the level of assessment of residential real estate.
- c. Equalization appraisal selection procedures for residential real estate. Residential properties to be appraised by department of revenue personnel for use in supplementing the assessment/sales ratio study shall be selected for each jurisdiction in the following manner:
- (1) The department appraiser assigned to the jurisdiction shall determine a systematic random sequence of numbers equal to the number of appraisals required and document the following steps.
- 1. The department appraiser assigned to the jurisdiction shall compute the interval number by dividing the total number of improved properties in the classification to be sampled by the number of appraisals to be performed.

EXAMPLE: In this example, ten appraisals are needed with a total of 1,397 improved residential units. Dividing 1,397 by 10, 139.7 is arrived at, which is rounded down to 139. This is the interval number.

2. The selection of the first sequence number shall be accomplished by having an available disinterested person randomly select a number from one through the interval number.

EXAMPLE: In this example a number from 1 to 139 is to be selected. The person randomly selected number 20.

3. The department appraiser shall develop a systematic sequence of numbers equal to the number of appraisals required. Starting with the randomly selected number previously picked by the disinterested person, add the interval number to this number and to each resulting number until a systematic sequence of numbers is obtained.

EXAMPLE: In this example ten appraisals are needed, so a sequence of ten numbers must be developed. Starting with number 20 and adding the interval number of 139 to it, each resulting number provides the following systematic sequence: 20, 159, 298, 437, 576, 715, 854, 993, 1,132, 1,271.

(2) Number of improved properties.

County jurisdictions—Put the name of each city or township having improved units in the classification to be sampled into a hat. Draw each one out of the hat and record its name in the order of its draw. Likewise, record the respective number of improved units for each. Then consecutively number all the improved units and document the procedure.

EXAMPLE:

City or	Number of	Code Numbers	
Township	Improved Residential Units	Numbers	
Franklin Twp.	57	1-57	
Pleasant View	160	58-217	
Jackson Twp.	56	218-273	
Johnston	300	274-573	
Polk Twp.	110	574-683	
Washington Twp.	114	684-797	
Maryville	306	798-1103	
Camden Twp.	110	1104-1213	
Salem	184	1214-1397	
Total	1,397		

(3) Determine the location of the improved properties selected for appraisal and document the procedure.

EXAMPLE:

	Number of			Entry
City or	Improved	Code	Sequence	on
Township	Residential Units	Numbers	Number	Rolls
Franklin Twp.	57	1-57	20	20
Pleasant View	160	58-217	159	102
Jackson Twp.	56	218-273		
Johnston	300	274-573	298,437	25,164
Polk Twp.	110	574-683	576	3
Washington Twp.	114	684-797	715	32
Maryville	306	798-1103	854,993	57,196
Camden Twp.	110	1104-1213	1132	29
Salem	184	1214-1397	1271	58
Total	1,397			

1. The department appraiser shall locate the property to be appraised by finding the relationship between the sequence numbers and the code numbers and identify the property.

EXAMPLE: The first sequence number is 20. Since the improved residential properties in Franklin Township have been assigned code numbers 1 to 57, sequence number 20 is in that location.

To identify this property, examine the Franklin Township assessment roll book and stop at the twentieth improved residential entry.

Document the parcel number, owner's name, and legal description of this property.

2. The department appraiser shall appraise the property selected unless it is ineligible because of any of the following restrictions:

Current year sale

Partial assessment

Prior equalization appraisal

Tax-exempt

Value established by court action

Value is not more than \$10,000

Building on leased land

3. The department appraiser shall determine a substitute property if the originally selected one is ineligible. In ascending order, select code numbers until an eligible property is found.

EXAMPLE: If code number 20 is ineligible, use code number 21 as a substitute. If code number 21 is ineligible, use code number 22, etc., until an eligible property is found.

If the procedure described in 102.12(2) "c" (3)"3" moves the substitute property to another city or township, select substitute code numbers in descending order until an eligible property is found.

If the procedure described in the previous paragraph moves the substitute property to a preceding city or township, go back to the procedure of 102.12(2) "c" (3) "3" even if it moves the substitute property to a subsequent city or township.

- 4. Select an alternate property for the originally selected property which also would be eligible. This is necessary because at the time of appraisal the property may be found to be ineligible due to one of the restrictions in 102.12(2) "c"(3)"2." Alternate properties are selected by using the same procedure described in 102.12(2) "c"(3)"3."
- 5. Follow procedures 102.12(2) "c"(3), items "1" to "4," for each of the other originally selected sequence numbers.

102.12(3) Reserved.

102.12(4) Commercial real estate.

- a. Use of assessment/sales ratio study.
- (1) Basic data shall be that set forth in rule 701—102.10(421), refined by eliminating any sales determined to be abnormal or by adjusting same to eliminate the effects of factors that resulted in the determination that the sales were abnormal. The basic data used shall be the assessment/sales ratio study conducted for sales taking place during the calendar year immediately preceding the year in which the equalization order is issued. The department of revenue may also supplement the assessment/sales ratio study with appraisals made by department appraisal personnel for the year immediately preceding the year in which the equalization order is issued. The assessment/sales ratio study including relevant appraisals, if any, shall be used to determine the aggregate actual valuation of commercial real estate in each assessing jurisdiction. The department may consider sales and appraisal data for prior years if it is determined the use of sales and appraisal data for the year immediately preceding the year in which the equalization order is issued is insufficient to determine market value. If such sales and appraisal data for prior years are used, consideration shall be given for any subsequent changes in either assessed value or market value. Properties receiving a dual classification with the primary use being commercial shall be included.
- (2) Assessors shall provide any known facts or circumstances regarding reported sales transactions and department appraisals that would indicate abnormal or unusual conditions or reporting discrepancies that would necessitate exclusion or adjustment of sales or appraisals from the determination of aggregate actual values. Assessors shall provide those facts within 45 days of receipt from the department of information concerning sales and appraisal data proposed for assessment/sales ratio and equalization purposes.
- b. Use of other relevant data. The department of revenue may also consider other relevant data and statistical measures, including field investigations conducted by representatives of the department, to determine the level of assessment of commercial real estate. The diverse nature of commercial real estate precludes the use of a countywide or citywide income capitalization study.
- c. Equalization appraisal selection procedures for commercial real estate. Commercial properties to be appraised by department of revenue personnel for use in supplementing the assessment/sales ratio study shall be selected for each jurisdiction in the manner outlined below. Properties receiving a dual classification with the primary use being commercial shall be included.
- (1) The department appraiser assigned to the jurisdiction shall determine a systematic random sequence of numbers equal to the number of appraisals required and document the following steps.
- 1. The department appraiser shall compute the interval number by dividing the total number of improved properties in the classification to be sampled by the number of appraisals to be performed.

EXAMPLE: In this example, ten appraisals are needed with a total of 397 improved commercial units. Dividing 397 by 10, 39.7 is arrived at, which is rounded down to 39. This is the interval number.

2. The selection of the first sequence number shall be accomplished by having an available disinterested person randomly select a number from one through the interval number.

EXAMPLE: In this example a number from 1 to 39 is to be selected. The person randomly selected number 2.

3. The department appraiser shall develop a systematic sequence of numbers equal to the number of appraisals required. Starting with the randomly selected number previously picked by the disinterested person, add the interval number to this number and to each resulting number until a systematic sequence of numbers is obtained.

EXAMPLE: In this example ten appraisals are needed, so a sequence of ten numbers must be developed. Starting with number 2 and adding the interval number of 39 to it, each resulting number provides the following systematic sequence: 2, 41, 80, 119, 158, 197, 236, 275, 314, 353.

- (2) Number of improved properties.
- 1. City jurisdictions—Utilizing the assessment book or a computer printout which follows the same order as the assessment book, consecutively number all the improved units and document the procedure.
- 2. County jurisdictions—Put the name of each city or township having improved units in the classification to be sampled into a hat. Draw each one out of the hat and record its name in the order of its draw. Likewise, record the respective number of improved units for each. Then consecutively number all the improved units and document the procedure.

EXAMPLE:

City or Township	Number of Improved Commercial Units	Code Numbers
Franklin Twp.	4	1-4
Pleasant View	60	5-64
Jackson Twp.	9	65-73
Johnston	100	74-173
Polk Twp.	10	174-183
Washington Twp.	14	184-197
Maryville	106	198-303
Camden Twp.	10	304-313
Salem	84	314-397
Total	397	

(3) The department appraiser shall determine the location of the improved properties selected for appraisal and document the procedure.

EXAMPLE:

	Number of			Entry
City or	Improved	Code	Sequence	on
Township	Commercial Units	Numbers	Number	Rolls
Franklin Twp.	4	1-4	2	2
Pleasant View	60	5-64	41	37
Jackson Twp.	9	65-73		
Johnston	100	74-173	80,119,158	7,46,85
Polk Twp.	10	174-183		
Washington Twp.	14	184-197	197	14
Maryville	106	198-303	236,275	39,78
Camden Twp.	10	304-313		
Salem	84	314-397	314,353	1,40
Total	397			

1. The department appraiser shall locate the property to be appraised by finding the relationship between the sequence numbers and the code numbers and identify the property.

EXAMPLE: The first sequence number is 2. Since the improved commercial properties in Franklin Township have been assigned code numbers 1 to 4, sequence number 2 is in that location.

To identify this property, examine the Franklin Township assessment roll book and stop at the second improved commercial entry.

The department appraiser shall document the parcel number, owner's name, and legal description of this property.

2. The department appraiser shall appraise the property selected unless it is ineligible because of any of the following restrictions:

Vacant building

Current-year sale

Partial assessment

Prior equalization appraisal

Tax-exempt

Only one portion of a total property unit (example—a parking lot of a grocery store)

Value established by court action

Value is not more than \$10,000

Building on leased land

3. The department appraiser shall determine a substitute property if the originally selected one is ineligible. In ascending order, select code numbers until an eligible property is found.

EXAMPLE: If code number 2 is ineligible, use code number 3 as a substitute. If code number 3 is ineligible, use code number 4, etc., until an eligible property is found.

If the procedure described in 102.12(4) "c" (3)"3" moves the substitute property to a city or township, select substitute code numbers in descending order until an eligible property is found.

If the procedure described in the previous paragraph moves the substitute property to a preceding city or township, go back to the procedure of 102.12(4) "c" (3) "3" even if it moves the substitute property to a subsequent city or township.

- 4. Select an alternate property for the originally selected property which also would be eligible. This is necessary because at the time of appraisal the property may be found to be ineligible due to one of the restrictions in 102.12(4) "c"(3)"2." Alternate properties are selected by using the same procedure described in 102.12(4) "c"(3)"3."
- 5. Follow procedures 102.12(4) "c" (3), items "1" to "4," for each of the other originally selected sequence numbers.

102.12(5) Industrial real estate. It is not possible to determine the level of assessment of industrial real estate by using accepted equalization methods. The lack of sales data precludes the use of an

assessment/sales ratio study, the diverse nature of industrial real estate precludes the use of a countywide or citywide income capitalization study, and the limited number of industrial properties precludes the use of sample appraisals. The level of assessment of industrial real estate can only be determined by the valuation of individual parcels of industrial real estate. Any attempt to equalize industrial valuations by using accepted equalization methods would create an arbitrary result. However, under the circumstances set forth in Iowa Code subsection 421.17(10), the department may correct any errors in such assessments that are brought to the attention of the department, including errors related to property with a dual classification if the primary use of the property is from the industrial portions.

102.12(6) Centrally assessed property. Property assessed by the department of revenue pursuant to Iowa Code chapters 428 and 433 to 438, inclusive, is equalized internally by the department in the making of the assessments. Further, the assessments are equalized with the aggregate valuations of other classes of property as a result of actions taken by the department pursuant to rule 701—102.11(441).

102.12(7) *Miscellaneous real estate.* Since it is not possible to use accepted equalization methods to determine the level of assessment of mineral rights and interstate railroad and toll bridges, these classes of property shall not be subject to equalization by the department of revenue. However, under the circumstances set forth in Iowa Code section 421.17(10), the department may correct any errors in assessments which are brought to the attention of the department.

This rule is intended to implement Iowa Code sections 441.21, 441.47, 441.48 and 441.49. [ARC 7726B, IAB 4/22/09, effective 5/27/09; ARC 9478B, IAB 4/20/11, effective 5/25/11; ARC 1765C, IAB 12/10/14, effective 1/14/15; ARC 2657C, IAB 8/3/16, effective 9/7/16; ARC 4170C, IAB 12/5/18, effective 1/9/19; ARC 6096C, IAB 12/15/21, effective 1/19/22; Editorial change: IAC Supplement 11/2/22; Editorial change: IAC Supplement 10/18/23]