



DEPARTMENT OF REVENUE
Property Tax Division

ASSESSMENT PROCEDURES MANUAL
PART THREE

Chapter 2
**Determining Mixed-Use
Percentages and
Assessment Ratios**
Revised: February 25, 2011
Effective: March 1, 2011

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CHAPTER 2

DETERMINING MIXED-USE PERCENTAGES AND ASSESSMENT RATIOS



DETERMINING MIXED-USE PERCENTAGES AND ASSESSMENT RATIOS

Many properties are used for more than one purpose simultaneously. These properties, referred to as "mixed-use" properties, must be classified proportionally in the appropriate legal classification, or legal class, for each use occurring on a property. That part of a property that is used for each purpose must be valued and assessed according to the statutory standards for each category of property use. Care must be exercised in calculating the assessment ratios that are applied to full cash values (FCVs) and limited property values (LPVs) when dealing with a property to which two or more legal classifications apply. Caution must also be taken in order to avoid any erroneous overall assessment ratios being applied to mixed-use properties.

For example, a parcel which is used primarily for "qualified" agricultural purposes, but which also has a commercial use on part of the parcel, must be classified in both Legal Class Two (for the agricultural use portion) and in Legal Class One (for the commercial use portion). Even though most of the parcel's land may be used for an agricultural purpose, the entire parcel does not qualify for a "qualified" agricultural use legal classification, or for application of the statutory land valuation procedure. Each part of the parcel must be classified according to its current use.

STATUTORY AUTHORITY

A.R.S. § 42-15010(B) states: "If a parcel of property has more than one percentage applied to its full cash value under this section due to multiple uses, the assessor shall apply the percentages to the limited property value of the parcel in the same proportion and in the same manner as to the parcel's full cash value."

The procedure for calculating the "effective" assessment ratio for a mixed-use parcel is described below. It requires that the proportion of full cash value of a parcel that is devoted to each use on that parcel be used to compute the "effective" (or overall) assessment ratio.



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Land area or other similar measures may not be used. The calculation must be based on the value attributed to each use occurring on a parcel.

The steps in the mixed-use assessment ratio calculation procedure are:

1. First, identify all of the property uses occurring on the parcel and the legal class appropriate for each use. Identify the uses for the land and improvements separately.
2. Next, determine the full cash value for the land in each legal class occurring on the parcel. Determine the percentage of the parcel's total land value that is devoted to each use by dividing the value attributed to each use by the total land Full Cash Value. Develop the assessed value for each legal class by multiplying the land's full cash value in each legal class by the assessment ratio for that class, then adding the results. This recognizes the mixed-uses of the land. Divide the total assessed value by the total land full cash value to arrive at the land's mixed-use assessment ratio.
3. Determine the full cash value for the improvements in each legal class in the same manner used for the land's mixed-use calculation. This will develop the assessment ratio for the mixed-use as it applies to the improvements.
4. Finally, add the full cash values and the assessed values for land and improvements for the parcel. Divide the sum of the assessed values by the sum of the full cash values to yield the overall effective mixed-use assessment ratio for the parcel.
5. The limited property value is multiplied by the overall assessment ratio to arrive at the assessed limited property value for the parcel.

The five steps described above are utilized below in an example of a mixed-use assessment ratio calculation for a hypothetical property.



CALCULATING MIXED-USE PERCENTAGES AND ASSESSMENT RATIOS

Note: The Legal Class One assessment ratio in the following examples is based on the 2011 Tax Year's twenty percent assessment ratio.

LAND MIXED-USE CALCULATION

Total Land Full Cash Value equals \$209,000.

Commercial Use: 1 acre x \$ 50,000 / acre = \$ 50,000
Agricultural Use: 159 acres x \$ 1,000 / acre = (+) \$159,000
\$209,000

Percent of use by value in each Legal Class:

Agricultural Use: \$ 159,000 ÷ \$ 209,000 = **.7608**
Commercial Use: \$ 50,000 ÷ \$ 209,000 = **.2392**

<u>Land Use</u>	<u>Land Value</u>		<u>Assessment Ratio</u>		<u>Assessed Value</u>	<u>Land's Mixed-Use Assessment Ratio</u>
Agricultural Use:	\$ 159,000	x	.16	=	\$25,440	
Commercial Use:	\$ 50,000	x	.20	= (+)	<u>\$10,000</u>	
					\$35,440	÷ \$209,000 = <u>.1696</u>

IMPROVEMENT MIXED-USE CALCULATION

Total Improvement Full Cash Value equals \$140,000.

Agricultural Use: \$ 52,000
Commercial Use: + \$ 88,000
\$140,000

Percent of use by value in each Legal Class:

Agricultural Use: \$52,000 ÷ \$ 140,000 = **.3714**
Commercial Use: \$88,000 ÷ \$ 140,000 = **.6286**

<u>Improvement Use</u>	<u>Imp. Value</u>		<u>Assessment Ratio</u>		<u>Assessed Value</u>	<u>Imp.'s Mixed-Use Assessment Ratio</u>
Agricultural Use:	\$52,000	x	.16	=	\$ 8,320	
Commercial Use:	\$88,000	x	.20	= (+)	<u>\$17,600</u>	
					\$25,920	÷ \$140,000 = <u>.1851</u>



OVERALL MIXED-USE ASSESSMENT RATIO CALCULATION

Land Full Cash Value:	\$209,000	Land Mixed-Use Assessed Value:	\$35,440
Improvement Full Cash Value: +	<u>\$140,000</u>	Imp. Mixed-Use Assessed Value: +	<u>\$25,920</u>
Total Full Cash Value:	\$349,000	Total Assessed Value:	\$61,360

<u>Total Assessed Value</u>	÷	<u>Total Full Cash Value</u>	=	Effective (Overall) Mixed-Use Assessment Ratio
\$61,360	÷	\$349,000	=	<u>.1758</u>

ADDITIONAL EXAMPLES OF MIXED-USE PERCENTAGE ASSESSMENT RATIOS

The following three examples further demonstrate how to calculate mixed-use percentages and assessment ratios. These examples present somewhat more complicated hypothetical properties with mixed-uses. They are also based on hypothetical values and utilize actual Tax Year 2011 assessment ratios. **These three examples are also included for illustrative purposes only.**

Example 1. A Duplex with Excess Land - one unit is the owner's residence; the other is a residential-rental unit.

Property Identification: A five-acre parcel has one-acre improved as a "homesite" and four acres of undeveloped land that is not part of the homesite. The value of the undeveloped land is \$10,000 per acre, while the developed homesite is valued at \$ 40,000 per acre. The duplex is located on the one-acre homesite and has an improvement value of \$80,000. The two units are identical.

LAND MIXED-USE CALCULATION

Total Land Full Cash Value equals \$80,000.

Residential (Owner-occupied):	0.5 acre	x	\$40,000 / acre	=	\$20,000
Residential (Rental):	0.5 acre	x	\$40,000 / acre	=	\$20,000
Undeveloped (Vacant land):	4.0 acres	x	\$10,000 / acre	= (+)	<u>\$40,000</u>
					\$80,000



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Percent of use by value in each Legal Class:

Residential (Owner-Occupied): $\$20,000 \div \$80,000 = .2500$
 Residential (Rental): $\$20,000 \div \$80,000 = .2500$
 Undeveloped (Vacant land): $\$40,000 \div \$80,000 = .5000$

<u>Land Use</u>	<u>Land Value</u>		<u>Assessment Ratio</u>		<u>Assessed Value</u>	<u>Land's Mixed-Use Assessment Ratio</u>
Residential (Owner-Occupied):	\$20,000	x	.10	=	\$ 2,000	
Residential (Rental):	\$20,000	x	.10	=	\$ 2,000	
Undeveloped (Vacant land):	\$40,000	x	.16	= (+)	\$ <u>6,400</u>	
					\$10,400	$\div \$80,000 =$ <u>.1300</u>

IMPROVEMENT MIXED-USE CALCULATION

Total Improvement Full Cash Value equals \$90,000.

Residential (Owner-Occupied): \$45,000
 Residential (Rental): + \$45,000
 \$90,000

Percent of use by Value in each Legal Class:

Residential (Owner-Occupied): $\$45,000 \div \$90,000 = .5000$
 Residential (Rental): $\$45,000 \div \$90,000 = .5000$

<u>Improvement Use</u>	<u>Imp. Value</u>		<u>Assessment Ratio</u>		<u>Assessed Value</u>	<u>Imp.'s Mixed-Use Assessment Ratio</u>
Residential (Owner-Occupied):	\$45,000	x	.10	=	\$4,500	
Residential (Rental):	\$45,000	x	.10	= (+)	\$ <u>4,500</u>	
					\$9,000	$\div \$90,000 =$ <u>.1000</u>

OVERALL MIXED-USE ASSESSMENT RATIO CALCULATION

Land Full Cash Value: \$ 80,000 Land Mixed-Use Assessed Value: \$10,400
 Imp. Full Cash Value: + \$ 90,000 Imp. Mixed-Use Assessed Value: + \$ 9,000
 Total Full Cash Value: \$170,000 Total Assessed Value: \$19,400

Total Assessed Value \div Total Full Cash Value = Effective (Overall) Mixed-Use Assessment Ratio
 \$19,400 \div \$170,000 = .1141



Example 2. A Citrus Grove, with a Retail Sales Facility and an Owner's Residence.

Property Identification: The property consists of a twenty-five acre citrus grove, a one-acre owner's residence "homesite", and two acres that are devoted to fruit sales and shipping. An analysis of local area market data indicates that one-acre residential sites are valued at \$50,000, and that commercial land is valued at \$3 per square foot. Further analysis indicates that "qualified" agricultural land that is used for permanent crops is valued by the Assessor at \$1,000 per acre. The improvements on the residential homesite consist of a single-family house with a detached garage with a value of \$125,000. The commercial improvements consist of a warehouse, shipping docks, etc., which are valued at \$100,000. The agricultural improvements on the land consist only of mature citrus trees, which are valued at \$600 per acre.

LAND MIXED-USE CALCULATION

Total Land Full Cash Value equals \$336,360.

Residential Use: 1 acre	x	\$50,000 / acre	=	\$ 50,000
Commercial Use: 2 acres	x	\$3.00 / sq. ft (\$3.00 x 43,560 sq. ft. x 2)	=	\$261,360
Agricultural Use: 25 acres	x	\$1,000 / acre	= (+)	<u>\$ 25,000</u>
				\$336,360

Percent of use by value in each Legal Class:

Residential Use:	\$ 50,000 ÷ \$336,360 =	.1487
Commercial Use:	\$261,360 ÷ \$336,360 =	.7770
Agricultural Use:	\$ 25,000 ÷ \$336,360 =	.0743

<u>Land Use</u>	<u>Land Value</u>	<u>Assessment Ratio</u>	<u>Assessed Value</u>	<u>Land's Mixed-Use Assessment Ratio</u>
Residential Use:	\$ 50,000	x .10 =	\$ 5,000	
Commercial Use:	\$261,360	x .20 =	\$52,272	
Agricultural Use:	\$ 25,000	x .16 = (+)	<u>\$ 4,000</u>	
				\$61,272 ÷ \$336,360 = <u>.1822</u>



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IMPROVEMENT MIXED-USE CALCULATION

Total Improvement Full Cash Value equals \$240,000.

Residential Use: \$125,000
Commercial Use: \$100,000
Agricultural Use: + \$ 15,000
 \$240,000

Percent of use by value in each Legal Class:

Residential Use: \$125,000 ÷ \$240,000 = **.5208**
Commercial Use: \$100,000 ÷ \$240,000 = **.4167**
Agricultural Use: \$ 15,000 ÷ \$240,000 = **.0625**

<u>Improvement Use</u>	<u>Imp. Value</u>	<u>Assessment Ratio</u>		<u>Assessed Value</u>	<u>Imp.'s Mixed-Use Assessment Ratio</u>
Residential Use:	\$125,000	x .10	=	\$12,500	
Commercial Use:	\$100,000	x .20	=	\$20,000	
Agricultural Use:	\$ 15,000	x .16	= (+)	\$ <u>2,400</u>	
				\$34,900	÷ \$240,000 = <u>.1454</u>

OVERALL MIXED-USE ASSESSMENT RATIO CALCULATION

Land Full Cash Value: \$ 36,360 Land Mixed-Use Assessed Value: \$61,272
Imp. Full Cash Value: + \$240,000 Imp. Mixed-Use Assessed Value: + \$34,900
Total Full Cash Value: \$576,360 Total Assessed Value: \$96,172

Total Assessed Value ÷ Total Full Cash Value = **Effective (Overall) Mixed-Use Assessment Ratio**
\$96,172 ÷ \$576,360 = **.1669**



Example 3. A “Cut Flower” Farm with a Commercial structure and an Owner's Residence.

Property Identification: The property consists of a five-acre cut flower farm. There is a one-half acre homesite for the owner's single-family residence. An analysis of local area market data indicates similar homesites are valued at \$40,000 per acre. The residence is valued at \$82,000. The flower stand, a small retail structure facing the highway, is valued at \$28,000. An analysis of local commercial land sales indicate the one acre of land it uses is worth \$3.60 per square foot. The balance of three and one-half acres of high-density agricultural land is utilized to grow cut flowers. An analysis of nearby agricultural land lease valuations indicates that “qualified” agricultural use land should be appraised at \$3,000 per acre.

LAND MIXED-USE CALCULATION

Total Land Full Cash Value equals \$187,316.

Residential Use:	0.5 acre	x	\$40,000 / acre	=	\$ 20,000
Commercial Use:	1.0 acre	x	\$3.60 / sq. ft (\$3.60 x 43,560 sq. ft.)	=	\$156,816
Agricultural Use:	3.5 acres	x	\$3,000 / acre	= (+)	<u>\$ 10,500</u>
					\$187,316

Percent of use by value in each Legal Class:

Residential Use:	\$ 20,000 ÷ \$187,316 =	.1068
Commercial Use:	\$156,816 ÷ \$187,316 =	.8372
Agricultural Use:	\$ 10,500 ÷ \$187,316 =	.0560

<u>Land Use</u>	<u>Land Value</u>	Assessment <u>Ratio</u>		<u>Assessed Value</u>	<u>Land's Mixed-Use Assessment Ratio</u>
Residential Use:	\$ 20,000	x .10	=	\$ 2,000	
Commercial Use:	\$156,816	x .20	=	\$31,363	
Agricultural Use:	\$ 10,500	x .16	=	(+) <u>\$ 1,680</u>	
				\$35,043 ÷ \$187,316 =	<u>.1871</u>



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IMPROVEMENT MIXED-USE CALCULATION

Total Improvement Full Cash Value equals \$110,000.

Residential Use: \$ 82,000
Commercial Use: + \$ 28,000
 \$110,000

Percent of use by value in each Legal Class:

Residential Use: \$82,000 ÷ \$110,000 = **.7455**
Commercial Use: \$28,000 ÷ \$110,000 = **.2545**

<u>Improvement Use</u>	<u>Imp. Value</u>		<u>Assessment Ratio</u>		<u>Assessed Value</u>	<u>Imp.'s Mixed-Use Assessment Ratio</u>
Residential Use:	\$82,000	x	.10	=	\$ 8,200	
Commercial Use:	\$28,000	x	.20	= (+)	\$ <u>5,600</u>	
						\$13,800 ÷ \$110,000 = <u>.1255</u>

OVERALL MIXED-USE ASSESSMENT RATIO CALCULATION

Land Full Cash Value:	\$187,316	Land Mixed-Use Assessed Value:	\$35,043
Imp. Full Cash Value:	+ \$ <u>110,000</u>	Imp. Mixed-Use Assessed Value:	+ \$ <u>13,800</u>
Total Full Cash Value:	\$297,316	Total Assessed Value:	\$48,843

<u>Total Assessed Value</u>	÷	<u>Total Full Cash Value</u>	=	<u>Effective (Overall) Mixed-Use Assessment Ratio</u>
\$48,843	÷	\$297,316	=	<u>.1643</u>