

Assessment Principles

Three Accepted Approaches to Value

- Cost Approach
- Sales Comparison Approach
- Property Income (Rental) Approach

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Overview of the Cost Approach

Land Valuation

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- Average selling prices for land
- As of the applicable base date (January 1, 2011)

Land Valuation

Non-Agricultural Land Valuation

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- Arm's length sales are collected and verified
- Determine units of comparison
- Identify neighbourhoods
- Determine base land rates (select median based on sales in the neighbourhood)

Land Valuation

Example:

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| Sale # | Total Sale Price (\$) | Parcel Size (Sq Ft) | Sale Price per Square Foot |
|--------|--------------------------|------------------------|-------------------------------|
| 1 | 15000 | 10000 | 1.50 |
| 2 | 9750 | 7500 | 1.30 |
| 3** | 9750 | 7500 | 1.30** |
| 4 | 8580 | 7000 | 1.22 |
| 5 | 8500 | 7500 | 1.13 |

**Median =
1.30/SF

Land Valuation

Assessment to Sale Price Ratio:

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| Sale # | 2011 Base Assessed Value (Land) | Total Sale Price (\$) | Ratio (ASR) |
|--------|---------------------------------|-----------------------|-------------|
| 1 | 13000 | 15000 | 0.86 |
| 2 | 9750 | 9750 | 1.00 |
| 3** | 9750 | 9750 | 1.00** |
| 4 | 9100 | 8580 | 1.06 |
| 5 | 9750 | 8500 | 1.14 |

**Median = 1.00

Improvement Valuation

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- Replacement cost new determined from SAMA's 2011 Cost Guide (residential and selected commercial) or Marshall Valuation Service (commercial)
- Adjust for depreciation (based on the age and condition of the structure)
- Adjust to reflect average selling prices for comparable improvements as of the base date (January 1, 2011) by using a MAF (market adjustment factor)
- A MAF is calculated for each sale and the MAF applied is developed from the median of comparable sales in the neighbourhood

Improvement Valuation

Market Adjusted Cost Approach

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- Calculate land value from sales
- Calculate Replacement Cost New (RCN) of Buildings less Depreciation
- Depreciated RCN X MAF = Building Value
- Land Value + Building Value =
2013 Assessed Value

Improvement Valuation

Depreciated Cost Estimate for a Residence:

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| | |
|--|-----------|
| Replacement Cost New (RCN) | \$125,000 |
| Less depreciation: - wear and tear (physical deterioration) | 20% |
| RCN less depreciation (RCNLD) | \$100,000 |

Improvement Valuation

Market Adjustment Factor (MAF)

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- A MAF is calculated for each sale in the neighbourhood. The MAFs are then arrayed and a median MAF is selected.

$$\text{MAF} = \frac{\text{SP (Land \& Buildings)} - \text{SP Land}}{\text{RCNLD}}$$

| | | |
|----------|-------------------|-----------|
| Example: | Total Sale Price: | \$100,000 |
| | Land Value: | \$20,000 |
| | RCNLD: | \$100,000 |

$$\text{MAF} = (\$100,000 - \$20,000) / \$100,000 = 0.80$$

Improvement Analysis

Example:

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| Sale # | Building Sale Price (\$) | RCNLD | MAF |
|--------|--------------------------|--------|------|
| 1 | 50,000 | 62,500 | 0.80 |
| 2 | 45,000 | 54,000 | 0.83 |
| 3** | 55,000 | 65,000 | 0.84 |
| 4 | 65,000 | 75,500 | 0.86 |
| 5 | 75,000 | 83,500 | 0.90 |

**Median MAF = 0.84

Land and Improvement Valuation

Assessment to Sale Price Ratio with 0.84 MAF:

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| Sale # | 2011 Base Assessed Value (Land and Buildings) | Sale Price (\$) | Ratio (ASR) |
|--------|--|--------------------|-------------|
| 1 | 62,000 | 60,000 | 1.03 |
| 2 | 55,000 | 55,000 | 1.00 |
| 3** | 65,000 | 65,000 | 1.00 |
| 4 | 73,000 | 75,000 | 0.97 |
| 5 | 80,000 | 85,000 | 0.94 |

**Median = 1.00

Summary of the Cost Approach

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- Property Value = land value + building value
 - Vacant land sales used to estimate land value.
 - Buildings are costed (RCN) using standardized procedures; actual cost not used
 - Physical depreciation assigned
 - Market depreciation assigned (MAF)

Agricultural Mixed-Use Land Amendment Summary

- Emergent 2011 Manual Amendment issue was identified
- Manual ag-mixed use land rules not in alignment with stakeholder direction
- Amendment ensures to greatest possible extent, land used for agricultural purposes is assessed using agricultural productivity model
- Amendment is proactive step for the 2013 revaluation

Agricultural Mixed Use Land

- Zoning is very important
- If zoning prohibits land from being used for agricultural production purposes the land is valued using the market valuation standard
- The assessed value of all other agricultural mixed use land shall be determined as follows:
 - (i) The actual area of a parcel used for non-agricultural use or the first three acres, whichever is greater, shall be assessed in a manner equivalent to the methodology that would be applied under the market valuation standard for a similar sized parcel.
 - (ii) The remainder of the area of the parcel exceeding the area determined in (i), shall be assessed at a value determined using the agricultural land valuation procedures in the Saskatchewan Assessment Manual.

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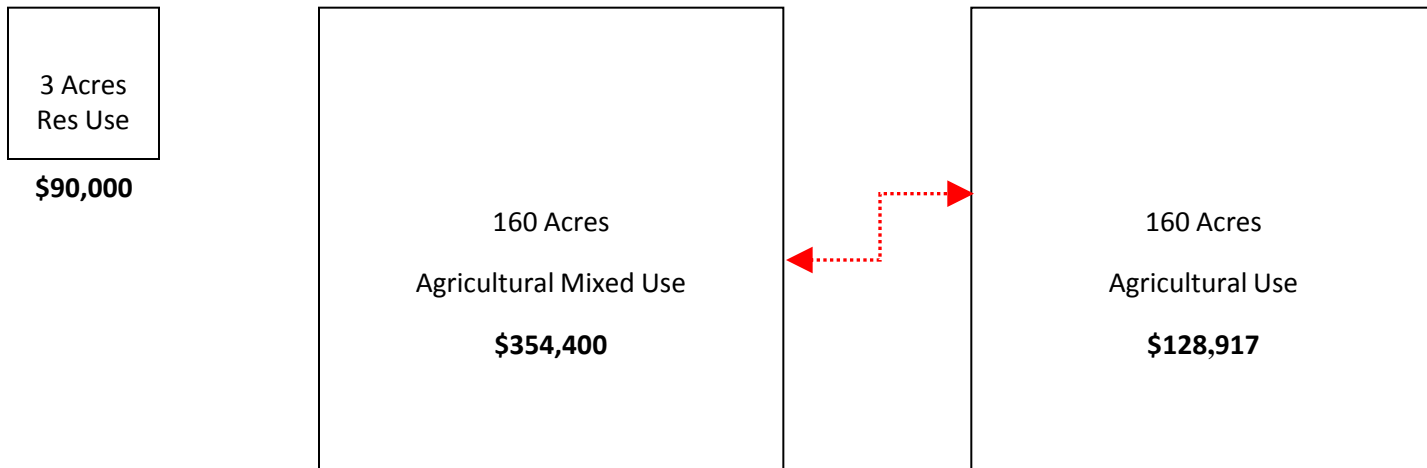
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Agricultural Mixed Use Land

Result of applying the old rules:

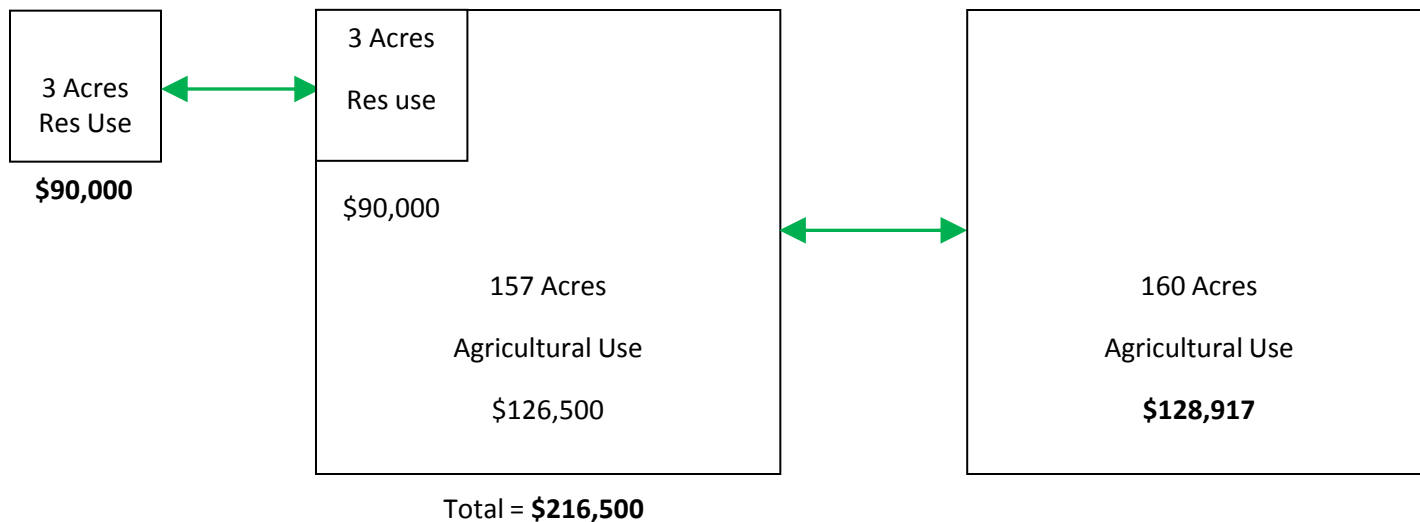
2006 Manual and previous 2011 MANUAL:



Agricultural Mixed Use Land

- Result of applying the new rules:

Amended 2011 MANUAL Amendment



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Overview of the Sales Comparison Approach Using Multiple Regression Analysis (MRA) Techniques

Sales Comparison Approach

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- Mass appraisal approach which determines the market value through a comparison of valid sales.
- Sale prices are used directly to identify value determining variables and ultimately calculate assessments.
- Preferred for single family or condo residential properties when adequate sales exist.
- Multiple Regression Analysis (MRA) techniques are commonly used to build sales comparison models.

Sales Comparison Approach

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- MRA is a statistical process that:
 - Is objective,
 - Requires less property characteristics
 - Can be recalibrated quickly
- There are three types of MRA models; Additive, Multiplicative and Hybrid.
- When properly specified and calibrated, all types achieve acceptable results.

Sales Comparison Approach – Application by SAMA

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- Hybrid:
 - Moose Jaw, Humboldt, Kindersley, Martensville, Warman, Weyburn, Estevan, Yorkton, Melville, Melfort
- Multiplicative:
 - Moose Jaw condominium model
 - Provincial High Rise and Low Rise Apartment Condominium model

Sales Comparison Approach - Hybrid Model Structure

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Assessed Value = Land Value + Improvement Value

Land Value considers the lot size and is adjusted for neighbourhood, land servicing & location factors

Improvement Value includes living area (main, basement, finished basement) and various interior features (fireplaces, air conditioning, etc) and exterior features (garage, deck, porch, etc) and is adjusted for neighbourhood, other location factors, construction type, quality, condition and depreciation.

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Overview of the Property Income (Rental) Approach

Property Income (Rental) Approach Overview

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- One of three internationally accepted methods of valuing property;
- Primary valuation approach for (rental) income producing properties;
- Income Approach is used for mass appraisal in other jurisdictions;
- Only considers property or rental income. Does not consider owner's personal income.

Reasons for Using Income Approach

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- Based on the Principle of Anticipation.
- Purchasers of an income property pay a sale price now, to receive future benefits (rental income stream)
- Accounts for the return on investment expected by typical purchasers of income producing properties.
- Primary approach used by industry as the valuator undertakes the same analysis as buyers and sellers of income producing properties.

Income Approach Theory

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The market value of a rental property can be estimated as the present worth of the future benefits that will accrue to the owner of a rental property over its economic lifetime.

Capitalization Rate

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**Capitalization Rate (R) =
Net Operating Income (NOI) / Sale Price**

Example:

**\$10,000 (NOI) / \$100,000 (Sale Price)
= 10% Capitalization Rate**

Effective Gross Income Multiplier (EGIM)

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- EGI = Gross Income less vacancy and collection loss

**Effective Gross Income Multiplier (EGIM) =
Sale Price / Effective Gross Income (EGI)**

Example:

**\$350,000 (Sale Price) / \$50,000 (EGI)
= 7 Effective Gross Income Multiplier (EGIM)**

SAMA's Income Approach Application for 2013

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1) Multi-Residential

- (Majority of apartments province-wide)

2) Accommodation

- (Hotels and Motels located in a city)

3) Shopping Malls

- (Regional and Community Enclosed Malls province-wide)

4) General Commercial

- (Retail, Office, Warehouse, etc - Moose Jaw, Yorkton, Estevan, Weyburn and respective RM's)

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Agricultural Land (Arable and Pasture)

2013 Ag Land Valuation Highlights

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- Agricultural Land Review Committee (ALRC) put forward recommendations for 2009 revaluation.
- The Agricultural Land valuation models are stabilized with only minor refinements for 2013 revaluation.
- The Ag models are regulated within the 2011 Base Year Assessment Manual and related legislation.

2013 Ag Land Valuation Highlights

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➤ Cultivated land model

- Continue to use a productivity soil indexing system
- Arable Provincial Factor (relates average provincial selling price to productivity) increased \$6.60 to \$9.77 or +48%.
- Minor soil association naming updates; added a few supplemental climate ratings.
- Waste Land remains at \$10 per acre.

2013 Ag Land Valuation Highlights

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- Pasture land model
 - Continue to use carrying capacity as the measure of productivity
 - Non-arable Provincial Factor (relates average provincial selling price to productivity) increased \$5.75 to \$8.51 or +48%.
 - Removed high water table; reduced imp/reverting vegetation factor 1.30 to 1.0.
 - Removed Hay Land model as no longer in use.