

# Market Value Assessment in Saskatchewan Handbook

## Amendments Summary (May 21, 2020)

### Introduction

The Market Value Assessment in Saskatchewan Handbook (Handbook) was created for assessors who are responsible for preparing market value based assessments for municipalities according to legislation in Saskatchewan. The Handbook is not a detailed instructional manual and is not meant to be prescriptive. The Handbook provides industry standard based valuation parameters for determining mass appraisal based assessments for a given group of properties. The primary focus of the Handbook is on the valuation of commercial and multi-family property using the income approach to value.

The Handbook is not a regulated document and does not have the force of law. Unlike the Saskatchewan Assessment Manual and SAMA's Cost Guide, the Handbook is not tied to a specific base date and can be updated at any point in the revaluation cycle. The SAMA Board approved a major update to the Handbook in 2012 to align it with the Market Valuation Standard in legislation. The Handbook was most recently amended in 2017 to remove base date specific references and reinforce that it is a living document.

The May 21, 2020 amendments are a result of feedback from stakeholders and Saskatchewan Assessment Service Providers. The amendments include updated, improved definitions for Multiple Regression Analysis (MRA), the Coefficient of Dispersion (COD) and the capitalization rate. The Market Adjustment Factor (MAF) references were updated to improve their consistency and to better align them with SAMA's Cost Guide.

### Amendments Overview

- Multiple Regression Analysis (MRA) explanation improved.
- Expanded Coefficient of Dispersion (COD) explanation.
- Saskatchewan capitalization rate explanation improved.
- Updated references to Market Adjustment Factor (MAF) for consistency.
- Changed name of "Strip" to "General" Commercial Properties and modified type of properties included and excluded. Added missing Market Rents, Fee Simple interest, Leasehold Interests explanation.
- Changed name of "Shopping" Centre to "Enclosed" Shopping Centre and clarified definition.
- Updated IAAO etc. definitions/references.
- Miscellaneous
- Deleted Appendix 1 - Data Collection Forms Examples.
- Updated Appendix 2 - Resources (now titled Appendix 1).
- Updated Glossary.

The Amendments on the following pages follow the same groupings as the Amendments Overview. Within each group the entries are in the chapter order of the Handbook.

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<b>Multiple Regression Analysis (MRA) Explanation Improved</b>	
<p><b>1. Introduction, Sales Comparison Approach, Page 11</b></p> <p>Multiple Regression Analysis (MRA) is a statistical technique that is commonly used in the sales comparison approach. MRA is used to analyze market (independent) variables, such as lot size, building size, building quality and location to predict the value of a single (dependent) variable, that being sale price (market value estimate). MRA is an effective tool for mass appraisal where there are adequate sales available for analysis and is commonly used for assessing residential property.</p> <p><b>2. Introduction, Page 13</b> “new”</p> <p><b>3. Valuation Parameters Guide, 2.0 Outline of Valuation Parameter Process, Title, Page 5</b></p> <p><b>4. Multi-Residential Valuation Guide, 3.3 Determine Market Rents and Valuation Parameters, Page 14</b></p> <p>Where there is adequate underlying data, multiple regression analysis (MRA) may also be used to help determine valuation parameters such as typical market rent. (Refer to the Introduction Chapter/Sales Comparison Approach section for an additional explanation of the MRA statistical technique.)</p> <p><b>5. Warehouse Valuation Guide, 5.1 Application of the Sales Comparison Approach, Page 21</b></p> <p>To establish market value based assessments multiple regression analysis (MRA) is a statistical technique that is commonly used in the sales comparison approach. MRA is used to analyze market (independent) variables, such as lot size, building size, building quality and location to predict the value of a single (dependent) variable, that being sale price (market value estimate). MRA is an effective tool for mass appraisal where there are adequate sales available for analysis. (Refer to the Introduction chapter for a general discussion on MRA.)</p> <p><b>6. Office Building Valuation Guide, 3.3 Analyse the Data, Establish Class of Office and Valuation Parameters, Page 11</b></p> <p>Where there is adequate underlying data, multiple regression analysis (MRA) may also be used to help determine valuation parameters such as typical rent.</p>	<p><i>Deleted</i></p> <p><i>Refer to Attachment #1</i> (Page 13 of this Summary)</p> <p><i>Added footnote:</i> <b>2.0 Outline of Valuation Parameter Process<sup>2</sup></b> <sup>2</sup> Refer to the Introduction chapter for a general discussion on Multiple Regression Analysis – MRA.</p> <p><i>Deleted</i></p> <p><i>Deleted</i></p> <p><i>Deleted</i></p>

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<p>(Refer to the Introduction Chapter/Sales Comparison Approach section for an additional explanation of the MRA statistical technique.)</p> <p><b>7. In the following Valuation Guides under “Practical Valuation Process”:</b></p> <ul style="list-style-type: none"> <li>Determining market value based assessments; and</li> </ul> <p><b>Multi-Residential</b> Page 7  <b>Manufactured Home Communities,</b> Page 7  <b>Warehouse,</b> Page 5  <b>Strip Commercial Properties,</b> Page 7  <b>Office Building,</b> Page 5  <b>Shopping Centre,</b> Page 5  <b>Gas Station,</b> Page 6  <b>Hotel/Motel,</b> Page 7  <b>Golf Course,</b> Page 7</p>	<p><i>Added:</i></p> <ul style="list-style-type: none"> <li>Determining market value based assessments (Refer to the Introduction chapter for a general discussion on Multiple Regression Analysis – MRA.); and</li> </ul> <p>Now called “General Commercial Properties”</p> <p>Now called “Enclosed Shopping Centre”</p>
<b>Expanded Coefficient of Dispersion (COD) Explanation</b>	
<p><b>8. Valuation Parameters Guide, 2.5 Statistically Testing Market Value Based Assessments, Measures of Appraisal Uniformity,</b> Pages 29-30</p>	<p><i>Added after last paragraph:</i></p> <p>Markets by their nature are imperfect. In less established markets characterized by scarce sales and unpredictable prices, often based in good part on the unique motivations of individual sellers and buyers with varying degrees of knowledge, there is a large random or unknown component in the price for which properties will sell. Even if assessment procedures are as good as can be expected, assessments can differ considerably from prices paid, resulting in high CODs. Simply put, the thinner, more varied, and less well-established the market stratification, the greater the differences between the assessments and sales prices resulting in higher CODs. Rural Saskatchewan is an example of one such market in which the price paid has a high unexplained price variability component, although how high is not known or quantifiable. As a result, the same COD standards cannot be applied as they would in a more established market. COD standards must be considered in light of the markets upon which they are generated. That is, higher CODs will often occur even with the best assessment practices.</p>
<b>Saskatchewan Capitalization Rate Explanation Improved</b>	
<p><b>9. Valuation Parameters Guide, 4.1 Critical Concepts,</b> Page 36</p> <p>For mass appraisal purposes in Saskatchewan, market value based assessments must reflect typical market conditions for similar properties as of the base date. For</p>	<p><i>Replaced with:</i></p> <p>For mass appraisal purposes in Saskatchewan, assessments are based on the modeled rents that reflect typical market conditions for similar properties as of the base date. The rent</p>

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<p>that reason, typical potential net operating income that reflects market conditions as of a given base date is used to determine both capitalization rates and to apply capitalization rates in determining market value based assessments.</p>	<p>model is applied back to the sold properties to estimate the typical potential net operating income. The capitalization rate is then determined from the modeled net operating income and the adjusted sale price that reflects the typical market conditions as of a given base date. In other words, both the rent and capitalization rates are modeled in determining market value based assessments.</p>
<p><b>Updated References to Market Adjustment Factor (MAF) for Consistency</b></p>	
<p><b>10. Introduction, 1.3 Market Valuation Standard, Cost Approach, Page 12</b></p> <p>(Refer to the Depreciation Analysis Guide for a detailed discussion of depreciation and obsolescence.)</p> <p><b>11. Depreciation Analysis Guide: 4.2 Methods of Estimating Depreciation, 3) Sales Comparison (Extraction) Method, Determination of Depreciation from Market Sales Evidence, Pages 19-20</b></p> <p>Another technique is the calculation of a Market Adjustment Factor (MAF) that adjusts for all normal functional and external obsolescence not already accounted for in the replacement cost and through physical deterioration adjustments.</p> <p><b>Depreciation and a Market Adjustment Factor (MAF)</b>  A MAF can be calculated with fewer sales than are needed to create a depreciation curve. The MAF is determined by analysing all of the comparable market value sales and is then applied to all comparable improvements.  One example of how a MAF can be calculated is demonstrated by the following steps:</p> <ol style="list-style-type: none"> <li>1) Identify potential sales comparables.</li> <li>2) Establish sale date, sale price, building and site areas, and land values.</li> <li>3) Determine net improvement values by subtracting estimated land values from the total sale price.</li> <li>4) Divide the net improvement value by the replacement cost new less normal age/life depreciation, to create a market ratio that is expressed as a percentage of the replacement cost new less depreciation.</li> <li>5) Array and stratify the market ratios for the sold properties, and use this to select a typical market ratio (MAF).</li> </ol>	<p><b>Added:</b>  (Refer to the Depreciation Analysis Guide for a detailed discussion of depreciation”, obsolescence and the Market Adjustment Factor – MAF.)”</p> <p><b>Replaced with:</b>  Another technique is the calculation of a Market Adjustment Factor (MAF) that adjusts for all external obsolescence and any loss or gain of the building or structure not already accounted for in the replacement cost and any difference in the amount of physical deterioration or functional obsolescence, that have not already been taken into account.</p> <p><b>Market Adjustment Factor (MAF)</b>  The MAF is determined by analysing all of the comparable market value sales and is then applied to all comparable improvements.  One example of how a MAF can be calculated is demonstrated by the following steps:</p> <ol style="list-style-type: none"> <li>1) Identify improved properties with comparable buildings or structures that are sales.</li> <li>2) Determine the market ratio for each improved property sale: <ol style="list-style-type: none"> <li>i. Determine the improved property sale price.</li> <li>ii. Determine the assessed value of the land.</li> <li>iii. Determine the replacement cost new less physical deterioration and functional obsolescence of the buildings or structures.</li> <li>iv. Calculate the residual building value by subtracting the assessed value of the land from the improved property sale price.</li> </ol> </li> </ol>

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<p><b>12. Gas Station Valuation Guide, 3.5 Deduct Depreciation and Obsolescence, Page 13</b></p>	<p>v. Calculate the market ratio by dividing the residual building value by the replacement cost new less physical deterioration and functional obsolescence.</p> <p>3) Determine the market adjustment factor for the comparable buildings and structures.</p> <p><b>Added after the second paragraph:</b>  <b>Market Adjustment Factor (MAF)</b>  Market adjustment factors are often required to adjust values obtained from the cost approach. This adjustment is developed to ensure that the estimated values are consistent with the overall market level of value as of the legislated base date. These adjustments should be applied by type of property and area based on sales ratio studies or other market analyses. (Refer to the Depreciation Analysis Guide for a general discussion on the MAF).</p>
<p><b>Changed Name of “Strip” to “General” Commercial Properties and modified type of properties included and excluded. Added missing Market Rents, Fee Simple interest, Leasehold Interests Explanation.</b></p>	
<p><b>13. Strip Commercial Properties Valuation Guide, throughout, Page 2 (Example)</b></p> <p>Strip commercial properties can be found lining most major thoroughfares in any town or city.</p> <p><b>14. Strip Commercial Properties Valuation Guide, 1.1 Nature of Strip Commercial Properties, Page 2</b></p> <p>However, the common characteristics are:</p> <ul style="list-style-type: none"> <li>• Orientation to the street;</li> <li>• Exposure to pedestrian or road traffic;</li> <li>• Commercial retail activities on the ground floor; and</li> <li>• In some instances residential, office, and/or other commercial activities on upper floors.</li> </ul> <p><b>15. Strip Commercial Properties Valuation Guide, 1.2 Strip Commercial Properties Covered in this Guide, Pages 2-3</b></p> <p>The term strip commercial properties refers to properties that:</p> <ul style="list-style-type: none"> <li>• Are oriented to street or road traffic;</li> <li>• Contain ground floor commercial activities;</li> <li>• Are generally located adjacent to other commercial or retail properties, but may stand alone;</li> </ul>	<p><b>Replaced with:</b>  General commercial properties can be found lining most major thoroughfares in any town or city.</p> <p><b>Replaced with:</b>  However, the common characteristics are:</p> <ul style="list-style-type: none"> <li>• Generally orientated to the street;</li> <li>• Exposure to pedestrian or road traffic;</li> <li>• Commercial activities on the ground floor; and</li> <li>• In some instances residential, office, and/or other commercial activities on upper floors.</li> </ul> <p><b>Replaced with:</b>  The term general commercial properties refers to properties that typically:</p> <ul style="list-style-type: none"> <li>• Are oriented to street or road traffic;</li> <li>• Contain commercial activities;</li> <li>• Are located adjacent to other commercial properties, but may stand alone;</li> </ul>

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<p>...</p> <p>Strip commercial properties not included in this valuation guide:</p> <ul style="list-style-type: none"> <li>• Auto dealerships;</li> <li>• Hotel and motel properties;</li> <li>• Multi-residential properties with four or more rental units;</li> <li>• Larger stand alone properties (for example - in excess of 30,000 square feet); and</li> <li>• Larger multi-tenanted commercial properties with sufficient on-site parking and not strictly oriented to the street. This type of property may be more appropriately categorized as a neighbourhood shopping centre. (Refer to the Shopping Centre Valuation Guide).</li> </ul> <p><b>16. Strip Commercial Properties Valuation Guide, 3.1 Collect Appropriate Data, Data Analysis, Pages 10-11</b></p>	<p>...</p> <p>General commercial properties not included in this valuation guide:</p> <ul style="list-style-type: none"> <li>• Hotel and motel properties;</li> <li>• Multi-residential properties with four or more rental units; and</li> <li>• Larger multi-tenanted commercial properties (enclosed malls) with sufficient on-site parking and not strictly oriented to the street. (Refer to the Enclosed Shopping Centre Valuation Guide).</li> </ul> <p><b>Added after:</b>  <b>3.1 Collect Appropriate Data, Data Analysis</b></p> <p><b>Using Market Rents</b>  In determining potential income, the assessor is not bound by the contractual rent between the landlord and the tenant. Market rents should be used to form the basis of valuation as opposed to actual rents because actual rents may reflect what market rents were at the time a given lease was negotiated (before the base date). Therefore, in order to capture the fee simple value of the real estate as of a particular date, typical market rents that reflect the market conditions as of the base date should be employed.</p> <p><b>Fee Simple Interest</b>  For assessment purposes, the market value of a property is its fee simple value. Fee simple estate is defined (<i>The Appraisal of Real Estate, 3rd Canadian Edition, 2010</i>) as “absolute ownership unencumbered by any other interest or estate, subject only to the limitations imposed by the four powers of government: taxation, expropriation, police power, and escheat.” A fee simple title is the ultimate ownership estate in real property and reflects all rights, title and interests in the property.</p> <p><b>Leasehold Interests</b>  Leasehold interests are created in a property where tenants pay less than the market rent. Such tenants could conceivably sublet their space for higher rents and enjoy some of the value of the property. To obtain a proper</p>

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	<p>market value under these circumstances it is necessary to value interests of both the property owner and the tenants.</p> <p>Following this line of thought, if all general commercial properties space is valued on the basis of market rents, the expected potential income represents both the income collected by the owner and the fee simple estate in the property.</p>
<b>Changed Name of “Shopping” Centre to “Enclosed” Shopping Centre and Clarified Definition</b>	
<p><b>17. Shopping Centre Valuation Guide and Valuation Parameters Guide, throughout, Page 2 (example)</b></p> <p>A shopping centre is a collection of retail outlets located on one property that offers a variety of goods for sale.</p> <p><b>18. Shopping Centre Valuation Guide, 1.1 Shopping Centres Covered in this Valuation Guide, Page 2</b></p> <p>The methods described in this valuation guide are designed to suit various types of shopping centres with the exception of strip malls. (Refer to the Strip Commercial Properties Valuation Guide).</p> <p><b>19. Valuation Parameter Guide, throughout, Page 4 (example)</b></p> <p>Examples from various property types (i.e. shopping centres, multi-residential properties and office buildings) are used in different sections of this Valuation Guide in order to provide a broader demonstration of some of the data and valuation parameters that are used to determine market value based assessments.</p>	<p style="text-align: center;"><i>Replaced with:</i></p> <p>An enclosed shopping centre (also referred to as an enclosed shopping mall) is a collection of retail outlets located on one property that offers a variety of goods for sale.</p> <p><b>Enclosed Shopping Centres Covered in this Valuation Guide</b></p> <p>The methods described in this valuation guide are designed to suit various types of enclosed shopping centres (enclosed malls) with the exception of general commercial properties. (Refer to the General Commercial Properties Valuation Guide). Typically, enclosed shopping centres have access to the commercial retail units (CRUs) and anchor tenants from the interior, but may have some access from the exterior of the building.</p> <p>Examples from various property types (i.e. enclosed shopping centres, multi-residential properties and office buildings) are used in different sections of this Valuation Guide in order to provide a broader demonstration of some of the data and valuation parameters that are used to determine market value based assessments.</p>
<b>Updated IAAO etc. Definitions/References</b>	
<p><b>20. Introduction, 1.3 Market Valuation Standard, mass appraisal, Page 7</b></p> <p>The IAAO (<i>Property Appraisal and Assessment Administration, 1990</i>, page 651) has a similar definition for mass appraisal - “The process of valuing a group of properties as of a given date, using standard methods, and allowing for statistical testing”.</p>	<p style="text-align: center;"><i>Replaced with:</i></p> <p>The IAAO (<i>Standard on Mass Appraisal of Real Property, 2013</i>, page 20) has a similar definition for mass appraisal - “The process of valuing a group of properties as of a given date, using standard methods, employing common data, and allowing for statistical testing”.</p>

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<p><b>21. Valuation Parameters Guide, 2.5 Statistically Testing Market Value Based Assessments, Appraisal Level, Page 29</b></p> <p>Appraisal level refers to the overall, or typical ratio at which properties are appraised in mass appraisal models. In mass appraisal, appraised values rarely equal their indicators of market value (i.e., sale prices), but over-appraisals should balance under-appraisals so that the typical close to 100%.</p> <p><b>22. Valuation Parameters Guide, 2.5 Statistically Testing Market Value Based Assessments, Level of Appraisal uniformity Page 29</b></p> <p>Appraisal uniformity refers to the fair and equitable treatment of individual properties. Uniformity requires two things: (1) equity <i>within</i> groups - that properties are appraised equitably within groups or categories (e.g. property classes, neighbourhoods); and (2) equity <i>between</i> groups - that each of these groups are appraised at the same level or ratio of value.</p> <p><b>23. Valuation Parameters Guide, 2.5 Statistically Testing Market Value Based Assessments, Other Statistical Tests, Page 30</b></p> <p>A good resource for these statistical tests and their uses is the IAAO publication entitled <i>Property Appraisal and Assessment Administration</i>.</p> <p><b>24. Valuation Parameters Guide, 4.1 Critical Concepts, Capitalization Rates, Page 36</b></p> <p>The <i>Dictionary of Real Estate Appraisal, 3rd Edition</i> defines the capitalization rate ...</p> <p><b>25. Depreciation Analysis Guide, 1.0 Overview, Depreciation, Page 2</b></p> <p>“a loss in value from the reproduction or replacement cost of an improvement due to any cause as of the date of the appraisal. It may also be defined as the difference between the reproduction or replacement costs of an improvement and its market value as of the date of appraisal”</p>	<p>Appraisal level refers to the overall, or typical ratio at which properties are appraised relative to market value. In mass appraisal, appraised values should not be expected always to equal their indicators of market value (i.e. sale prices), but high and low ratios should balance, so that the typical ratio is near 100%.</p> <p>Appraisal uniformity relates to the extent to which appraisal procedures produce logical and consistent results across individual properties. Uniformity requires, first, that properties be appraised equitably within groups or categories (use classes, neighbourhoods, and so forth); that is, how close are the individual ratios to the typical ratio (appraisal level)? Second, each group of properties should be appraised at approximately the same level or percentage of market value. In sum, appraisal uniformity requires equity <i>within</i> groups and <i>between</i> groups.</p> <p>A good resource for these statistical tests and their uses are the IAAO publications entitled <i>Fundamentals of Mass Appraisal, Property Assessment Valuation, or Assessment Administration</i>.</p> <p>The <i>Dictionary of Real Estate Appraisal, 4<sup>th</sup> Edition</i> defines the capitalization rate...</p> <p>“the difference between the market value of an improvement and its reproduction or replacement cost at the time of appraisal. The depreciated cost of an improvement can be considered an indication of the improvement’s contribution to the property’s market value.”</p>

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<p><b>26. Depreciation Analysis Guide, Curable Physical Deterioration, Page 6</b>  “... items of deferred maintenance; the estimate of curable physical deterioration applies only to items in need of repair on the date of the appraisal.”</p> <p><b>27. Depreciation Analysis Guide, Incurable Physical Deterioration, Page 6</b>  “... that which, as of the date of the appraisal, is not economical to repair or replace, that is, the cost of repair exceeds the gain in value”.</p> <p><b>28. Depreciation Analysis Guide, Functional Obsolescence, Page 7</b>  It can also be defined as:  “loss in value due to inability of the structure to perform adequately the function for which it is being used, as of the appraisal date. Functional obsolescence results from changes in demand, design, and technology and can take the form of deficiency..., need for modernization..., or superadequacy...”</p> <p><b>29. Depreciation Analysis Guide, External Obsolescence), Page 8</b>  “the loss in value as a result of impairment in utility and desirability caused by factors outside the property’s boundaries.”</p> <p><b>30. Depreciation Analysis Guide, External Obsolescence, Page 8</b>  One cause of external depreciation is locational obsolescence that is, the “loss in value due to suboptimal siting of an improvement.”</p>	<p>“items of physical deterioration are considered curable, if the cost to cure is less than the resulting increase in value.”</p> <p>“... <i>not economically</i> justified to correct, because the cost to cure is greater than the value added by curing the depreciation”.</p> <p>It can also be defined as:  “the loss of value in a property improvement due to changes in style, taste, technology, needs, and demands and can be curable or incurable. It is the inability of a structure to perform adequately the function for which it is currently used.”</p> <p>“the loss in value as a result of impairment in utility and desirability caused by factors external to the property (outside of the property’s boundaries).”</p> <p>One cause of external depreciation is locational obsolescence that is, the “loss in value due to suboptimal siting of an improvement.”</p>
<b>Miscellaneous</b>	
<p><b>31. Introduction, 1.3 Market Valuation Standard, Three Approaches to Value, Title, Page 10</b>  Three Approaches to Value</p> <p><b>32. Introduction, 1.3 Market Valuation Standard, Sales Comparison Approach (Value in Exchange), Title, Page 11</b>  Sales Comparison Approach (Value in Exchange)</p>	<p><b>Replaced with:</b>  Three Approaches to Value (Sales Comparison, Cost and Income Approaches)</p> <p><b>Replaced with:</b>  Sales Comparison Approach</p>

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<p><b>33. Introduction, 1.3 Market Valuation Standard, Income Approach, Page 12</b></p> <p>Typically, income-producing properties include commercial and investment properties such as:</p> <ul style="list-style-type: none"> <li>• Rental apartments</li> <li>• Warehouses</li> <li>• Offices</li> <li>• Enclosed shopping centres</li> <li>• Hotels / motels</li> <li>• Other</li> </ul> <p><b>34. Warehouse Valuation Guide, 6.2 Overview of the Procedure, Page 23</b></p> <p>1) Determine the market value based land assessment using the sales comparison approach.</p> <p>...</p> <p><b>35. Gas Station Valuation Guide, 2.3 Application of the Cost Approach, Page 5</b></p> <p>Comparable land sales should be investigated through a sales verification process to ensure the results reflect the market value of the estate in fee simple subject to the requirements of legislation. In addition any leases and leasehold interests should be considered in the analysis of land values.</p> <p><b>36. Gas Station Valuation Guide, 3.1 Collecting the Appropriate Data, Data Analysis, Page 10</b></p> <p>For the assessor to gain full value from the data collected, the data should be organized in such a way that meaningful comparisons can be made to reach valuation conclusions.</p> <p><b>37. Golf Course Valuation Guide, 3.2 Collect the Appropriate Data, Supporting Information, Page 8</b></p> <ul style="list-style-type: none"> <li>• Golfing publications such as <i>Golf the West</i>.</li> </ul> <p><b>38. Golf Course Valuation Guide, 4.4 Estimating Replacement Cost New, Course Improvements, Page 18</b></p> <p><i>SAMA's Cost Guide</i> also presents a Standard Golf Course: Development Cost Schedule on a dollar per hole basis.</p>	<p><b>Replaced with:</b></p> <p>Typically, income-producing properties include commercial and investment properties such as:</p> <ul style="list-style-type: none"> <li>• Multi-residential buildings</li> <li>• Manufactured home communities</li> <li>• Warehouses</li> <li>• General commercial properties</li> <li>• Office buildings</li> <li>• Enclosed shopping centres</li> <li>• Hotels / motels</li> </ul> <p><b>Added Step 1) &amp; renumbered subsequent steps:</b></p> <p>1) Collect appropriate information.</p> <p>2) Determine the market value based land assessment using the sales comparison approach.</p> <p>...</p> <p><b>Replaced with:</b></p> <p>Comparable land sales should be investigated through a sales verification process to ensure the results reflect the market value of the estate in fee simple subject to the requirements of legislation. Any leases and leasehold interests should be considered in the analysis of land values and adjusted to ensure the value is the estate in fee simple.</p> <p><b>Replaced with:</b></p> <p>For the assessor to gain full value from the data collected, the data should be organized in such a way that meaningful comparisons can be made, and valuation conclusions drawn.</p> <p><b>Replaced with:</b></p> <ul style="list-style-type: none"> <li>• Golfing publications.</li> </ul> <p><b>Replaced with:</b></p> <p><i>SAMA's Cost Guide</i> presents a Standard Golf Course: Development Cost Schedule on a dollar per hole basis as well as for Short Golf Courses.</p>

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<p><b>39. Special Purpose Properties Valuation Guide, Figure 1: Special Purpose Property – Determining the Valuation Standard, Page 5</b></p> <p><b>40. Grain Elevator Valuation Guide, 3.6 Obsolescence Deducted from RCNLD, Page 16</b></p> <p>In order to account for the cyclical nature of the grain industry and to establish an accurate allowance for functional and external obsolescence, it is a good practice to stabilize the TAF by considering the throughputs over a number of consecutive years.</p> <p><b>41. All Chapters except Preface, Table of Contents, Appendix 1: Resources, and Glossary, Page 1 (footnote)</b></p> <p>The following Acts provide the statutory basis for property assessment in Saskatchewan:</p> <ul style="list-style-type: none"> <li>• <i>The Assessment Management Agency Act</i></li> <li>• <i>The Interpretation Act, 1995</i></li> </ul> <p>...</p>	<p><i>Refer to Attachment #2</i> (Page 14 of this Summary)</p> <p><b>Replaced with:</b></p> <p>In order to account for the cyclical nature of the grain industry and to establish an accurate allowance for functional and external obsolescence, it is a good practice to stabilize the TAF by considering the throughputs over a number of consecutive years.</p> <p><b>Replaced with:</b></p> <p>The following Acts provide the statutory basis for property assessment in Saskatchewan:</p> <ul style="list-style-type: none"> <li>• <i>The Assessment Management Agency Act</i></li> <li>• <i>The Legislation Act</i></li> </ul> <p>...</p>
<b>Deleted Appendix 1 - Data Collection Forms Examples</b>	
<p><b>42. Appendix 1: Data Collection Forms Examples</b></p>	<p><i>Deleted</i></p>
<b>Updated Appendix 2 - Resources (now titled Appendix 1 - Resources)</b>	
<p><b>43. Appendix 2: Resources, throughout</b></p>	<p><i>Updated</i></p>
<b>Updated Glossary</b>	
<p><b>44. Assessment level, Page 1</b> Assessment level for a specified group of properties means the overall ratio of assessments to indicators of market value.</p> <p><b>45. Base Date, Page 1</b> Term defined in <i>The Assessment Management Agency Act</i> section 2(e.1); means the date established by the agency in accordance with the regulations for determining the value of land and improvements for the purpose of establishing assessment rolls for the year in which the valuation or revaluation is to be effective and for each subsequent year preceding the year in which the next revaluation is to be effective. (See the Preface for specific base dates.)</p> <p><b>46. Commercial Retail Unit (CRU), Page 2</b> Tenants of a shopping centre other than anchor tenants. Also referred to as ancillary tenants.</p>	<p><b>Replaced with:</b></p> <p><b>Appraisal (Assessment) level</b> Appraised level for a specified group of properties means the overall ratio of appraised values to indicators of market value</p> <p>Term defined in <i>The Assessment Management Agency Act</i> section 2(e.1); means the date established by the agency in accordance with the regulations for determining the value of land and improvements for the purpose of establishing assessment rolls for the year in which the valuation or revaluation is to be effective and for each subsequent year preceding the year in which the next revaluation is to be effective.</p> <p>Tenants of an enclosed shopping centre other than anchor tenants. Also referred to as ancillary tenants.</p>

<b>Handbook - Current</b>	<b>Handbook – May 21, 2020 Amendments</b>
<p><b>47. Cost Approach, Page 3</b>  Approach for estimating market value based assessments that quantifies the cost in current dollars to recreate the property being assessed and assumes that a potential purchaser would pay no more for that property than the cost of replacement.</p> <p><b>48. External obsolescence, Page 4</b>  (1) The loss in value as a result of impairment in utility and desirability caused by factors outside the property’s boundaries. (2) The diminished utility or salability of an improvement due to negative influences from outside the property</p> <p><b>49. Functional obsolescence, Page 4</b>  Decrease in value caused by an inability of an improvement to perform its function efficiently; may be attributable to deficiencies, defects, inefficiencies, or super-adequacies of a property.</p> <p><b>50. Multiple Regression Analysis (MRA), Page 7</b>  Quantitative technique for measuring the magnitude of the market's response to data elements; used to relate the characteristics of sold properties to their sale prices.</p>	<p>Approach for estimating market value based assessments that quantifies the cost as of the specified base date to recreate the property being assessed and assumes that a potential purchaser would pay no more for that property than the cost of replacement.</p> <p>The loss in value as a result of impairment in utility and desirability caused by factors external to the property (outside of the property’s boundaries).</p> <p>The loss of value in a property improvement due to changes in style, taste, technology, needs, and demands and can be curable or incurable. It is the inability of a structure to perform adequately the function for which it is currently used.</p> <p>Statistical mass appraisal technique for estimating unknown data on the basis of known and available data. (Refer to the Introduction Chapter for a general discussion on MRA.)</p>

## Attachment #1: Introduction, *Added after 1.3 Market Valuation Standard, Three Approaches to Value, Income Approach, Page 13*

### Multiple Regression Analysis (MRA) Explanation<sup>2</sup> (statistical mass appraisal technique)

Multiple Regression Analysis (MRA) is a statistical mass appraisal technique that is available to assessors to use in the application of the three approaches to value, subject to having adequate sales and income related data for its application. MRA is used for estimating unknown data on the basis of known and available data. In mass appraisal, the unknown data is typically market value. This is the dependent variable. The known and available data are property characteristics and sales or income data. These are the independent variables.

MRA quantifies the relationship among multiple independent variables and a dependent variable. This technique is used in mass appraisal to estimate market values based on property characteristics and location data. In mass appraisal, the dependent variable can be a market value estimate, potential gross income, capitalization rate, or any other component of the three approaches to value.

Regardless of model format, MRA operates on the principle of least squares, in that it finds the lowest sum of squared errors between actual and estimated values. MRA contains a rich set of diagnostic statistics that aid the assessor in evaluating the accuracy and reliability of the model.

The assessor *specifies* the model by determining which variables to include in the model based on a combination of judgment and experience and exploratory data analysis. The assessor may write transformations to create the appropriate variables. This process is known as *specification*.

The assessor then uses MRA to *calibrate* the model. Model *calibration* is the process of solving for unknown quantities in a model associated with the independent variables in the model. For example, construction costs, depreciation in the cost model, valuation rates and adjustments in a sales comparison model, and market rents and capitalization rates in an income model.

MRA can also be used to estimate parameters for the income approach to value (rent per unit, expense ratios, gross income multipliers, and capitalization rates) from an analysis of many variables. In mass appraisal, rents, expenses, GIMs, and overall rates can all be estimated in one of two basic ways: by developing typical per-unit values through stratification, often using spreadsheet software, or by using statistical techniques such as MRA.

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<sup>2</sup> Gloudemans, Robert and Almy, Richard, *Fundamentals of Mass Appraisal*, (The International Association of Assessing Officers, 2011)

**Attachment #2: Special Purpose Properties Valuation Guide, Figure 1: Special Purpose Property – Determining the Valuation Standard, Page 5**

**Current:**

**May 21, 2020 Amendment**

*Added: “and SAMA’s Cost Guide” in the box below the Market Valuation Standard*

