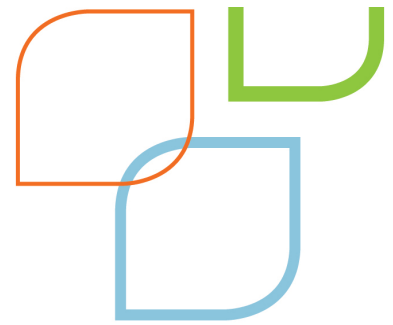




MUNICIPAL
PROPERTY
ASSESSMENT
CORPORATION



METHODOLOGY GUIDE

VALUING GRAIN ELEVATORS IN ONTARIO

Valuation Date: January 1, 2016

AUGUST 2016



MUNICIPAL PROPERTY ASSESSMENT CORPORATION

August 22, 2016

The Municipal Property Assessment Corporation (MPAC) is responsible for accurately assessing and classifying property in Ontario for the purposes of municipal and education taxes.

In Ontario's assessment system, MPAC assesses your property value every four years. This year, MPAC is updating the value of every property in the province to reflect the legislated valuation date of January 1, 2016.

MPAC is committed to provide Ontario property owners, municipalities and all its stakeholders with the best possible service through transparency, predictability and accuracy in values. As part of this commitment, MPAC has defined three levels of disclosure of information in support of its delivery of this year's assessment update. This Methodology Guide is the first level of information disclosure.

This guide provides an overview of the valuation methodology undertaken by MPAC when assessing grain elevators for this year's update ensuring the methodology for valuing these properties is well documented and in alignment with industry standards.

Property owners can access additional information about their own properties through aboutmyproperty.ca. Login information for aboutmyproperty.ca is provided on each Property Assessment Notice mailed this year. Additional information about MPAC can be accessed at mpac.ca.

A handwritten signature in black ink, appearing to read "Antoni Wisniowski", written over a thin horizontal line.

Antoni Wisniowski
President and Chief Administrative Officer

A handwritten signature in black ink, appearing to read "Rose McLean", written over a thin horizontal line.

Rose McLean, M.I.M.A.
Chief Operating Officer

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1.0 Introduction

The Municipal Property Assessment Corporation (MPAC) – mpac.ca – is responsible for accurately assessing and classifying property in Ontario for the purposes of municipal and education taxation.

In Ontario, property assessments are updated on the basis of a four-year assessment cycle. The next province-wide Assessment Update will take place in 2016, when MPAC will update the assessments of Ontario's nearly five million properties to reflect the legislated valuation date of January 1, 2016. Assessments updated for the 2016 base year are in effect for the 2017–2020 property tax years. Ontario's assessment phase-in program prescribes that assessment increases are phased in over a four-year period. Any decreases in assessment are applied immediately.

It is important to ensure that the valuation methodology applied is capable of providing a realistic estimate of current value at the relevant valuation date, which, in turn, enables all stakeholders to understand the valuation process and have confidence in the fairness and consistency of its outcome.

This Methodology Guide has been prepared for the benefit of MPAC assessors, property owners and their representatives, municipalities and their representatives, Assessment Review Board members, provincial officials, and the general public.

This guide outlines the valuation process to be followed by an assessor, including steps that require appraisal judgment. It is incumbent upon the assessor to make informed decisions throughout the valuation process when arriving at estimates in current value.

1.1 Properties Covered by This Methodology Guide

This Methodology Guide applies specifically to federally licensed grain elevators in Ontario, and is not intended to be used for elevators that do not require licensing with the Canadian Grain Commission.

A grain elevator is essentially a tower containing a bucket elevator or a pneumatic conveyor, which transports grain from a lower level and deposits it in a silo or other storage facility. In the context of this guide, the term "grain elevator" covers the entire elevator complex, including receiving and testing offices, weighbridges, storage facilities, etc.

In Canada, the term "grain elevator" is used to refer to a place where farmers sell grain into the global grain distribution system and/or a place where the grain is moved into rail cars or ocean-

going ships for transport. Specifically, there are several types of grain elevators under Canadian law, defined in the Canada Grain Act, Section 2, as follows:

- Primary elevators (called "country elevators" before 1971) receive grain directly from producers for storage, or forwarding, or both.
- Process elevators (called "mill elevators" before 1971) receive and store grain for direct manufacture or processing into other products.
- Terminal elevators receive grain on or after official inspection and weighing, and they clean, store, and treat grain before moving it forward.

All companies operating terminal elevators in Canada must be licenced by the Canadian Grain Commission, which maintains a list of all licenced companies currently operating in the country.

There are many types and sizes of grain elevators in Ontario, ranging from very large facilities with over 350,000 tonnes capacity to smaller facilities with as little as 10,000 tonnes capacity.

The following MPAC property codes are used to categorize the various types of grain elevators in Ontario:

- 522 Grain elevators – Great Lakes waterway
- 523 Grain handling – Primary elevators
- 525 Process elevators

Terminal grain elevators are given the property code 522.

It should be noted that these are general guidelines that vary depending on the specific circumstances of a particular property.

An assessor may also make reference to additional Methodology Guides for properties that do not fall precisely within the description of one of the property codes listed above.

1.2 Legislation

The main legislation governing the assessment of properties in Ontario for property tax purposes is contained in the Assessment Act.¹

¹ Assessment Act, R.S.O 1990, c A.31: <https://www.ontario.ca/laws/statute/90a31>.

The Act contains important definitions and states that all property in Ontario is liable to assessment and taxation, subject to some exemptions. Section 19(1) of the Act requires that land be assessed at current value, which is defined to mean, in relation to land, “the amount of money the fee simple, if unencumbered, would realize if sold at arm's length by a willing seller to a willing buyer.”

Section 17.1 of Ontario Regulation 282/98 defines a “grain elevator” to mean, “an elevator used to receive, store, clean, treat or transfer feed for livestock or grain.”² Section 17.3 of the Assessment Act specifically provides that Section 33(1) of the Act does not apply for the 2012 and 2013 taxation years. This means that no omitted assessments for grain elevators can be made for the 2012 or 2013 taxation years.

1.3 Classification

MPAC’s role is to accurately assess and classify all properties in Ontario in accordance with the Assessment Act and regulations established by the Government of Ontario.

The Minister of Finance signed Ontario Regulation 257/14 on December 8, 2014, to amend Ontario Regulation 282/98 by adding sections 17.1, 17.2, 17.3 and 44.2 and revoking sections 6(2)4 and 14(2)3 of the regulation.

Prior to this amendment, Section 6(2)4 of Ontario Regulation 282/98 specifically prescribed that “elevators used to receive, store, clean, treat or transfer feed for livestock or grain” be placed in the Industrial Property Class.

Section 17.2 of Ontario Regulation 257/14 now prescribes that a grain elevator is to be included in the Commercial Property Class, subject to certain conditions described in paragraphs (2), (3), (4) and (6), which would either include the grain elevator in the Farm or Residential Property Class. (See the appendix.)

If a portion of the property is used for other purposes, it may be necessary to value those components separately and sum the component values to achieve the correct total current value. It may also be necessary to apportion the total value of the property between the various uses to ensure that the appropriate tax rate is applied to the relevant parts of the property.

² Ontario Regulation 282/98, GENERAL: <https://www.ontario.ca/laws/regulation/980282>.

1.4 The Use of This Methodology Guide

This Methodology Guide is intended to:

- Ensure MPAC’s assessed values for these properties are fair, accurate, predictable and transparent.
- Provide direction to assessors and clear explanations to municipalities, taxpayers and Assessment Review Board members.
- Ensure that MPAC’s methodology for valuing these properties is well documented and aligns with industry standards.
- Explain the thought process/decision-making process that an assessor should undertake to apply the valuation methodology.
- Ensure a consistent approach to valuing these property types.
- Support MPAC assessors in conducting their due diligence in:
 - applying Ontario’s legislation and regulations
 - adhering to industry standards for market valuation in a mass appraisal environment

It should be noted that this Methodology Guide is not intended to be a substitute for an assessor’s judgment in arriving at a market value–based assessment (i.e., current value) for a particular property. However, given that the Methodology Guide explains industry standards for property assessment, conforms to valuation industry norms, and adheres to provincial legislation and regulation, MPAC assessors are expected to follow the procedures in the Methodology Guide and be able to clearly and satisfactorily justify any deviations from it.

1.5 Consultation and Disclosure

MPAC is committed to providing municipalities, taxpayers and all its stakeholders with the best possible service through transparency, predictability and accuracy. In support of this commitment, MPAC has defined three levels of disclosure as part of its delivery of the 2016 province-wide Assessment Update.

- **Level 1** – Methodology Guides explaining how MPAC approached the valuation of particular types of property

- **Level 2** – Market Valuation Reports explaining how the methodology outlined in Level 1 has been applied at the sector level for the purposes of each assessment
- **Level 3** – Property Specific Valuation Information available to property taxpayers, their representatives and municipalities

2.0 The Valuation Process

The valuation process always begins with a determination of the highest and best use of the subject property.

Any reliance upon this guide is made only after the assessor has determined that the highest and best use of the subject property is that of a federally licensed grain elevator.

Assessors determine the value of a property using one of three different approaches to value:

- the direct (sales) comparison approach
- the income approach
- the cost approach

2.1 Outline

In the **direct (sales) comparison approach**, value is indicated by recent sales of comparable properties in the market. In considering any sales evidence, it is critical to ensure that the property sold has a similar or identical highest and best use as the property to be valued.

In the **income approach** (or, more accurately, the income capitalization approach), value is indicated by a property's revenue-earning power, based on the capitalization of income. This method requires a detailed analysis of both income and expenditure, both for the property being valued and other similar properties that may have been sold, in order to ascertain the anticipated revenue and expenses, along with the relevant capitalization rate.

In the **cost approach**, value is estimated as the current cost of reproducing or replacing improvements of the land (including buildings, structures and other taxable components), less any loss in value resulting from depreciation. The market value of the land is then added.

This approach separately values improvements and land to produce a current value for the property. The cost approach for grain elevators has the following main steps for grain elevator buildings and structures:

1. Determine reproduction cost new (RCN).
2. Determine physical depreciation.
3. Determine functional obsolescence.

4. Determine external obsolescence.
5. Determine net improvement value.

The assessor then follows the same steps to determine the value of the elevator site improvements (yardwork).

Finally, the assessor determines land value for the grain elevator complex and adds the values for other purposes (e.g., excess land). At this point, the assessor is ready to determine the current value assessment.

2.2 Approach

There are three main phases in the valuation process used by MPAC:

- data collection
- analysis of the data collected
- valuation

2.3 Data Collection

The data required for grain elevator valuations come from a number of sources:

- MPAC conducts periodic inspections of grain elevators.
- MPAC also collects information about sales and transfers of grain elevators.
- There are a number of guides and other published information about grain elevators from industry sources, such as the Canadian Grain Commission and industry and port authority websites.

MPAC generally collects the following types of data for grain elevators:

- land data – including commercial, industrial, excess land and other land
- site improvements data – including interior and exterior access roads, waterfront facilities, rail facilities, tunnels and utilities (electrical, water, sewage, gas)
- building improvements data – including elevator, silos, workhouses, administrative offices, weighbridges, conveyors, walkways, workshops, security facilities and other storage facilities

The land will be measured in terms of its size in acres. Buildings will normally be measured in square feet. Storage facilities may be measured in terms of “bushel capacity.”

The assessor will record details not only of the size and capacity of the buildings and structures, but also their age, condition and use.

MPAC will either prepare a plan of the site and buildings or obtain one from the site operator. The site plan will identify all the different buildings, structures and other improvements by a reference number for ease of identification.

These reference numbers will be used in the valuation of the grain elevator to ensure that all parts of the property are properly included in the current value assessment.

Confidentiality

As outlined above, it is important to be aware that, in order to enable MPAC to produce an accurate valuation of the property concerned, information needs to be obtained from a variety of sources.

This will include information from MPAC’s records, from the owner or operator of the property, from the municipality in which the property is located, from the assessor’s visit to the property, and from other sources.

All stakeholders in the property tax system have an interest in ensuring that the current value provided by MPAC is correct; in order to achieve this, it is necessary for all parties to cooperate in the provision of information.

It is appreciated that some of the information outlined above may be of a commercially sensitive nature. MPAC recognizes the need to ensure that any information provided to it is properly safeguarded and only used for the purpose for which it is supplied. Assessors must appreciate the nature of this undertaking and ensure data is treated accordingly.

If, after an appeal has been filed, MPAC receives a request for the release of actual income and expense information, or other sensitive commercial proprietary information, the usual practice is to require the person seeking the information to bring a motion before the Assessment Review Board (ARB), with notice to the third parties, requesting that the ARB order production of the requested information. The release of such information is at the discretion of the ARB and commonly accompanied by a requirement for confidentiality.

The Assessment Act outlines in section 53(2) that disclosed information may be released in limited circumstances “(a) to the assessment corporation or any authorized employee of the

corporation; or (b) by any person being examined as a witness in an assessment appeal or in a proceeding in court involving an assessment matter.”

2.4 Data Analysis

Having carried out the data collection outlined previously, the assessor needs to analyze it and reach a conclusion regarding the appropriate valuation method to use and how it should be applied.

As already indicated, for the purposes of this Methodology Guide, it is assumed that the assessor will conclude that there is insufficient evidence available to enable either the direct comparison approach or income approach to be adopted. For that reason, the assessor will be adopting the cost approach and using the data collected to ensure that the cost approach is properly applied.

2.5 Valuation

Having undertaken the necessary steps outlined above, the assessor should now be in a position to apply the appropriate valuation model. A detailed walkthrough of the valuation process is included in Section 3.

2.6 Validating the Results

Once the assessor has completed the valuation, it is necessary to carry out a series of checks to ensure that all relevant parts of the property have been included in the valuation, there has been no double-counting of any adjustments made for depreciation, the resulting valuation has been compared with any market evidence that may be available in relation to similar properties, and the final valuation is in line with the valuation of other similar properties in Ontario.

3.0 The Valuation

3.1 Cost Approach Overview

The theory behind the cost approach to value follows the principle of substitution: the value of a property is equal to the amount it would cost to replace it with a substitute of equal utility.

There are two main tasks in estimating market value using the cost approach: value the land and value the improvements.

Value the Land

The estimate for the current value of the land is usually established through analysis of comparable market sales data.

Value the Improvements

A valuation of improvements includes the following steps:

1. Collect the physical and descriptive data about the grain elevator. Inspect the buildings, structures and other improvements, quantify areas, note conditions and analyze their utility.
2. Quantify the building areas from plans and layouts, or, if necessary, during the property inspection.
3. Using MPAC's automated cost system (ACS), estimate the reproduction cost new of the assessable improvements as of the valuation date.
4. Deduct from reproduction cost new value an amount reflecting all forms of depreciation. This may include:
 - physical deterioration (age-life depreciation)
 - functional obsolescence (curable and incurable)
 - external obsolescence (economic and locational obsolescence)

The resulting value will be an estimate of the contribution of the improvements to the market value of the subject, depreciated for all causes.

Final Value

The sum of land value plus depreciated improvement value is the estimated market value of the real estate at the subject location.

3.2 Land Valuation

Essential sources of information that can be used in the valuation of grain elevators include: assessment records, municipal zoning by laws, owners, real estate consultants and brokers, real estate publications, cost manuals (for site servicing costs) and title registration offices.

Comparable sales are utilized in determining land values whenever possible.

The following types of land uses may be associated with a federally licensed grain elevator site:

- commercial
- industrial
- other use
- excess land

The assessor will normally assign a separate value to each type of land use.

3.3 Building and Site Improvements

Various building and site improvements are essential to the functioning of a grain elevator. They may include, but are not limited to:

- elevator
- silos
- other storage facilities
- workhouses
- administrative offices
- weighbridges
- conveyors
- walkways
- workshops
- security facilities
- washrooms
- canteen
- utilities (electrical, water, sewage, gas)
- exterior access roads

- interior access roads
- waterfront facilities
- rail facilities
- tunnels
- parking

The assessor will obtain as much factual information as possible about both the nature of the improvements and the way in which they are used. The assessor will talk to the operator of the grain elevator to obtain a proper understanding of the way in which the improvements are used and their efficiency.

3.4 Establishing Cost New

Three approaches can be used to establish cost new:

- historical construction cost – actual costs indexed to the valuation date, which may be useful for relatively new buildings or structures (up to 5 to 10 years)
- reproduction cost techniques – applied in the valuation of most buildings or structures and obtained from cost manuals such as the Automated Cost System (ACS) developed for MPAC
- replacement cost techniques – may be applied when estimating the cost of a modern facility that is different to the existing grain elevator and which may be used in connection with quantifying any functional obsolescence

Depending on the functional utility of the grain elevator in the market, the assessor will select the most relevant option for the subject property. In most cases, MPAC will use reproduction cost new (RCN) as the starting point for the valuation.

3.5 Deducting Depreciation/Obsolescence

Depreciation may include physical deterioration due to age, condition and/or use of the property. Depreciation may also include obsolescence.

Obsolescence reflects the abnormal depreciation that arises in some properties due to functional and/or externally generated economic problems.

Functional obsolescence can be the result of numerous factors, including poor or outdated designs, inadequate areas, excess operating costs, etc.

Obsolescence is not related to the age of the property but to its ability to adequately perform its intended functions.

When determining whether obsolescence exists in a property, the assessor asks: “Could the existing facility be replaced with a more modern, efficient substitute, and if so, what would constitute this modern facility?”

Knowledge of current trends and building designs for grain elevators is important in recognizing obsolescence. Functional obsolescence can usually be recognized through poor design and layout, poor or inferior construction, unused areas and the existence of excess operating costs.

External obsolescence results from a change of circumstances outside the control of the grain elevator operator. This could be a large-scale factor such as economic recession and a change in the price/value of grain or a more localized factor such as a change in the local transportation infrastructure, which makes the location of the grain elevator less attractive and less valuable.

There are a variety of methods that can be used to quantify depreciation. The detail of these methods is not appropriate for this guide. However, while it is important to quantify all aspects of depreciation, it is equally important not to double count for the same aspect of depreciation while using the various approaches.

After the amount and degree of depreciation have been determined and quantified (if any), the end result should reflect the reproduction cost new of the building and site improvements less any depreciation (RCNLD) found in the present improvements.

3.6 Market Value Conclusion

The assessor adds the value of the land to the value of the depreciated building and site improvements in order to produce the market value of the property based on the cost approach.

3.7 Current Value Assessment

The final step in the process is to consolidate a current value assessment for the property. Once the determination of value using the cost approach has been completed, the assessor will consider whether there is any other value in the real estate that has not been captured by the analysis.

Add Other Components of Value

There may be grain elevators where the value is not entirely captured by the application of the cost approach. For example, there may be excess land available that has not been included in the valuation of the grain elevator.

Excess Land

Excess land is land that is surplus to current needs. The value of excess land depends on its location within the site and how well it suits future developments. Such surplus land would have to be valued separately and added to the current value assessment arrived at for the grain elevator.

Before arriving at an excess land conclusion, a site inspection is required to ensure that additional development would be possible. The determination of excess land involves a review of current zoning bylaws as well as the current coverage and configuration of the property. The rate to be applied to value excess land is typically derived using market sales studies of vacant land sites.

3.8 Quality Control

Having arrived at the value of the grain elevator through the above process, the assessor will check the outcome of the valuation to ensure no errors have been made and that the value is in line with the valuation of other similar grain elevators in Ontario.

Comparisons between current value assessments of grain elevators may be made by reference to “bushel capacity” or “metric tonnes,” taking into account locational and other differences between the properties.

3.9 Conclusion

This guide sets out how MPAC assessors approach the valuation of grain elevators for property assessment purposes.

Although it outlines the general approach adopted, it does not replace the assessor’s judgment and there may be some cases where the assessor adopts a different approach for justifiable reasons.

For further information about MPAC’s role, please visit mpac.ca.

Appendix

O. Reg 257/14	Conditions	Commercial Class	Farm Property Class	Residential Property Class
17.2(1)	Grain Elevator on Land Valued under Section 19(1) of the Assessment Act	XX		
17.2(2)	Grain Elevator on Land Valued under Section 19(5) of the Assessment Act <ul style="list-style-type: none"> • Exclusively used by the Farmer 		FT Class (Approved by OMAFRA)	
17.2(3)	Grain Elevator on Land Valued under Section 19(5) of the Assessment Act <ul style="list-style-type: none"> • Exclusively used by the Farmer 			RT Class (Not Approved by OMAFRA for the FT class)
17.2(4) 17.2(5)	Grain Elevator on Land Valued under Section 19(5) of the Assessment Act <ul style="list-style-type: none"> • NOT Exclusively used by the Farmer 	% of total grain or feed not owned by the farmer	FT Class (Approved by OMAFRA)	
17.2(6) 17.2(7)	Grain Elevator on Land Valued under Section 19(5) of the Assessment Act <ul style="list-style-type: none"> • NOT Exclusively used by the Farmer 	% of total grain or feed not owned by the farmer		RT Class (Not Approved by OMAFRA for the FT class)