



# Rating revaluations handbook

LINZG30700

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# Foreword

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- Introduction**
- (a) With the introduction of the Rating Valuations Act 1998 (RVA), territorial authorities became responsible for the production of the district valuation roll and the Valuer-General became responsible for monitoring the maintenance of the roll and certifying revaluations against the standards set out in the Rating Valuations Rules.
  - (b) The Rating Valuations Rules set minimum quality standards for all aspects of the rating valuation process, including revaluations. The Rating Valuations Rules are risk-based and focus only on what must be achieved, rather than how this might be done.
  - (c) The government's required end outcome for rating valuations is that ratepayers have confidence that the district valuation roll provides a fair basis for determining rates.
- 

**Purpose of the handbook** This handbook aims to help territorial authorities and their valuation service providers provide assurance to the Valuer-General that their revaluation meets the minimum compliance standards for certification.

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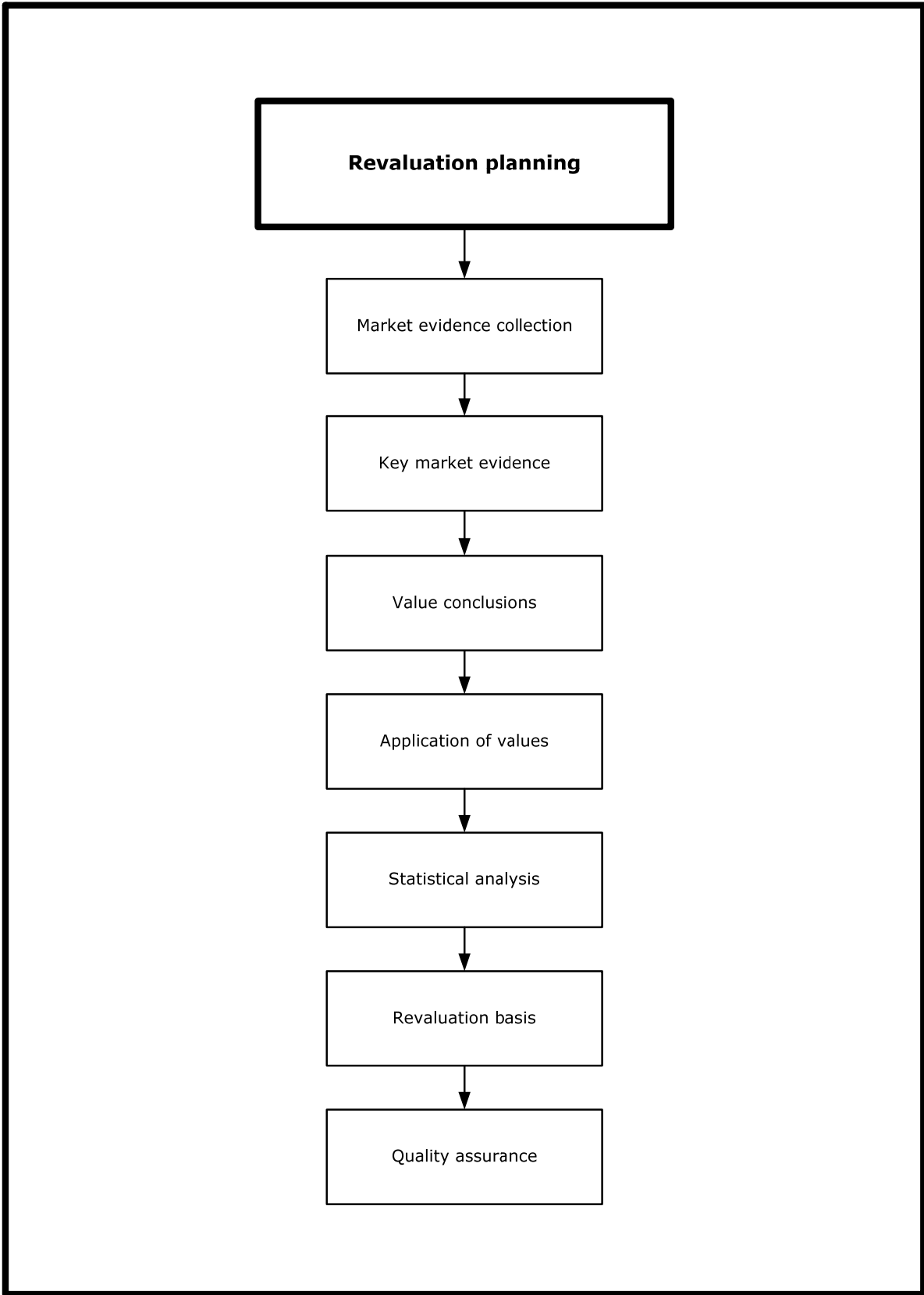
**Scope** This handbook provides best-practice guidelines that are based on the Valuer-General's experience of significant issues from revaluations since 1998.

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**References** The following documents are necessary for the application of this handbook.

- *Franklin District Council v Cryer* HC Auckland CIV-2009-404-8172, 23 August 2010
- *McKee v Valuer-General, Comesky v Valuer-General* [1970] NZLR 760 (High Court), [1971] NZLR 436 (Court of Appeal)
- Local Government (Rating) Act 2002
- Rating Valuations Act 1998
- Rating Valuations Rules 2008
- Resource Management Act 1991
- *Telecom Auckland Ltd v Auckland City Council* [1995] 3 NZLR 489
- Te Ture Whenua Māori Act 1993/Māori Land Act 1993
- *Valuer-General v Electricity Corporation of New Zealand Limited* (Court of Appeal, CA188/97, CA185/97, 6 October 1998, Blanchard J)
- *Valuer-General v Mangatu Inc* [1997] 3 NZLR 641





# Revaluation planning

## 1. Overview

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- Introduction**
- (a) Sound planning is a prerequisite to achieving a quality revaluation that can be certified with minimal changes or audit issues.
  - (b) An effective revaluation plan will include a detailed project plan and appropriate allocation of resources.
- 

**Contents** This chapter contains the following topics:

Topic	See page
Project planning	4
Rating unit compliance	11
Exceptions to rating unit compliance testing	14

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## 2. Project planning

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**Introduction** Project planning is a key element in revaluation planning and achieving a successful certification.

---

**Contents** This section contains the following topics:

<b>Topic</b>	<b>See page</b>
When to start	5
Roles and responsibilities	5
Assurance statement	5
Inspections and collection of data	10
Quality assurance tools	10

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*Continued on next page*

## Project planning, continued

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- When to start**
- (a) Project planning for a revaluation should begin at least 12 months prior to the effective date of valuation.
  - (b) Monitoring the accuracy of current values and identifying revaluation issues should be done constantly from implementation of the current values through to the next revaluation.
- 

- Roles and responsibilities**
- (a) When planning a revaluation, the following items should be discussed and agreed upon by the territorial authority (TA) and the valuation service provider (VSP).
    - (i) roles and responsibilities of the TA and the VSP, including who will provide the audit files to the Valuer-General (VG)
    - (ii) the database that will be used to carry out the revaluation. If there is a shared or dual database arrangement, the agreement about how this will operate should be clearly documented.
    - (iii) a timeline to carry out the revaluation, including milestones that the TA can use to monitor progress
    - (iv) which quality assurance tools will be used to review proposed values and when they will be used. Refer to page 10 for more on quality assurance tools.
    - (v) any additional specialists who should be involved in the revaluation.
  - (b) This information should be set out in a project plan supported by a written agreement for the avoidance of doubt.
- 

- Property Institute of New Zealand Standards**
- (a) It is recommended that any standards for statutory valuations issued by the Property Institute of New Zealand (PINZ) are complied with, and any exceptions are documented.
  - (b) If there is any discrepancy between PINZ standards and the Rating Valuations Rules 2008 (Rules), the Rules take precedence.
- 

- Assurance statement**
- (a) The Revaluation and DVR Assurance Statement is a reporting tool designed by the VG to help TAs record which quality assurance initiatives they have completed to support the revaluation process.
  - (b) A TA should plan to cover the items in the sample Revaluation and DVR Assurance Statement set out on the following pages.
-

**[year] Revaluation and DVR Assurance Statement**

**[City/District Council]**

- To be completed by the Territorial Authority and returned to the Valuer-General along with revaluation basis.
- Please respond by marking under **Y** for yes, **N** for no or **N/A** if not applicable.
- Additional comments should be provided for clarity, especially where **N** or **N/A** are marked

Territorial Authority: \_\_\_\_\_ Valuation service provider: \_\_\_\_\_ DVR maintained by: \_\_\_\_\_

Assurance statement completed by: \_\_\_\_\_ Date: \_\_\_\_\_ [dd/mm/yyyy]

	<b>Y</b>	<b>N</b>	<b>N/A</b>	<b>COMMENTS</b>
<b>1. Meetings held between TA and VSP</b>				
1.1 Meetings were held to formalise planning, roles, and responsibilities of each party for the revaluation process.				
1.2 The Rating Revaluations Handbook has been used during the revaluation to assist with compliance.				
1.3 The District Plan, zoning changes, and other key issues that may influence values were discussed between TA planners and VSP valuers to help identify where revaluation hot spots may exist.				
<b>2. Revaluation inspection programme</b>				
2.1 The TA has agreed to a revaluation inspection programme with the VSP.				<i>Provide details of the selection process used to set the programme.</i>

	Y	N	N/A	COMMENTS
<b>3. LINZ data integrity checks</b>				
3.1 LINZ integrity checks sent to the VSP have been reviewed, with any necessary changes to the DVR completed before or as part of the revaluation.				
<b>4. Completion of roll maintenance compliance checks</b>				
4.1 The VSP has carried out roll maintenance work in accordance with the Rules, ie comparable parcels recorded, plans captured, and construction details noted etc.				<p><i>Include details of the roll maintenance state of work status as at 30 June and revaluation.</i></p> <p><i>NOTE: TAs should audit the VSP to gain assurance that roll maintenance work complies with the Rules.</i></p>
<b>5. Determination of rating units</b>				
5.1 All rating units comply with rule 2.4.				<p><i>Explain the processes used to determine rating units.</i></p> <p><i>Specific checks should be documented. LINZ can supply details of the tests it has previously run, if required.</i></p>
<b>6. Zone codes</b>				
6.1 All zone codes in the land use data have been reviewed and updated to ensure the DVR land use data for each rating unit is consistent with the district plan.				<p><i>NOTE: The VG intends to examine the use of electronic thematic maps in future audits. The effectiveness of these maps relies heavily on accurate zoning data and corresponding land value levels.</i></p>
<b>7. Previous revaluation audit report</b>				
7.1 The previous revaluation report has been reviewed and recommended actions carried out.				<p><i>Please comment on the specific actions carried out to address the recommendation in the previous report.</i></p>

	Y	N	N/A	COMMENTS
<b>8. Settled objections from past revaluations</b>				
8.1 Settled objections from past revaluations have been reviewed and analysed.				
8.2 Trends identified from analysis of settled objections from past revaluations have been addressed in this revaluation.				
<b>9. Details of other issues since previous revaluation</b>				
9.1 Sub-locations or pockets of property types that required special attention in this revaluation have been identified.				<i>State how these properties were identified.</i>
<b>10. Revaluation registered valuer peer review</b>				
10.1 Properties that require peer review of the valuation have been identified.				<i>Provide details of the key properties or groups of properties that were subject to a peer review of part or all of the valuation process. Key properties typically have a high value, have a material effect on the rating base or are high-profile for the district, and may include sub pockets, such as central business district or forestry properties.</i>
<b>11. Validation process</b>				
11.1 The property and sales files have gone through the LINZ validation process and there are no errors.				
<b>12. Revaluation basis</b>				
12.1 The TA has reviewed the revaluation basis and considers that all key issues have been identified.				
12.2 The TA generally agrees with the value conclusions.				

	Y	N	N/A	COMMENTS
<b>13. Quality assurance process</b>				
13.1 Independent review of the revaluation and conclusions has been carried out.				<p><i>Provide details of any TA-initiated internal or external review of the revaluation and conclusions.</i></p> <p><i>If the TA generated thematic maps to check value results, details of the parameters chosen, and the results, should be documented.</i></p>



## Project planning, continued

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### Inspections and collection of data

When planning for inspections and data collection, the TA and VSP should agree on:

- (a) the process for deciding which properties will be inspected. See page 30 for more information on property inspections,
  - (b) what types of properties to target when collecting non-sales evidence. Refer to page 38 for more information on non-sales evidence,
  - (c) who will be contacted to comment on issues specific to the current market. This could include agents, valuers, industry experts, and owners of substantial properties,
  - (d) the method to be used to collect data. This could include surveys. Refer to page 42 for more information on surveys, and
  - (e) what property data and market evidence the TA will provide to the VSP and how it will be provided.
- 

### Quality assurance tools

The following are examples of tools that may help in the revaluation planning and quality assurance process. Note that there are other tools available.

Tool	Notes
Thematic maps	<p>Thematic maps may be useful during the revaluation planning stage to provide an overview of large geographic areas.</p> <p>These maps can be tailored to represent different values in a geographic area, using colour bands for both current and proposed values.</p>
Aerial photographs	<p>Aerial photographs can be used to remotely view properties in a district, and can help in identifying improvements. When a topographic map is overlaid on an aerial photograph this can help to identify contours and land classes.</p>

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### 3. Rating unit compliance

---

**Refer to** Rule 2.4, section 5A of the Rating Valuations Act 1998

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- Introduction**
- (a) Under the RVA and the Rules, the district valuation roll (DVR) must be constructed legally as at the effective date of valuation and this is the TA's responsibility. This means that all rating units must be correctly identified and entered in the DVR before the revaluation can be certified. In some cases, this will require input from the VSP, as explained later in this section.
  - (b) The TA should explain the process used to ensure that the rating units on the DVR are correct.
  - (c) The correct rating unit should be determined before it is valued.
- 

- Share titles are not rating units**
- (a) Section 5A of the RVA sets out the three types of certificate of title (CT) that may constitute a rating unit in the DVR.
  - (b) Freehold CTs for only a part share of an estate in fee simple, which reference the overall fee simple legal description and overall land area are not valid CTs for the purpose of the DVR.
  - (c) Share titles are different to cross lease titles. Cross lease titles are for an undivided share in an estate in fee simple and an estate in leasehold of a building on land comprised in the fee simple. Cross lease titles are valid for the purpose of the DVR.
  - (d) Share titles often have the original fee simple head title cancelled when the part share titles are issued. This is an administrative arrangement which can be reversed at the request of share title owners. In these cases either the previous cancelled head title can be referenced in the DVR with 'no' for additional titles or one of the share titles with 'yes' in the additional CT field.
- 

**Leasehold titles cannot be amalgamated** The *Cryer* case confirmed that leasehold titles cannot be amalgamated with freehold titles to constitute one rating unit.

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## Rating unit compliance, continued

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- Compliance testing**
- (a) When reviewing individual rating units to check if they should be entered in the DVR as more than one rating unit, the testing criteria on this page should be used as a minimum.
  - (b) The VG uses these testing criteria to measure compliance of rating units on the DVR.
- 

- Exceptions to testing**
- (a) Property categories **other**, **utilities**, and **economic rural** do not require compliance testing for potential additional rating units, as there are exceptions within the Rules for these categories to have more than one CT per rating unit.
  - (b) For more on exceptions to compliance testing, refer to page 14.
- 

- Testing criteria for potential additional rating units**
- Test for rating units where:
- (a) **Y** (Yes) is displayed in the DVR in the **additional certificate of title** field, and either:
    - (i) the terms **Lots**, **Lts**, **Secs**, **Sections**, **Flats**, or **Units** appear in the legal description, or
    - (ii) the terms **Lot**, **Sec**, **Flat**, or **Unit** appear more than once in the legal description, or
    - (iii) the word **and** or the symbol **&** appear in the legal description, or
    - (iv) the category is **\*v\*** or **\*b\***. This test picks up vacant and block land.
- 

- Testing criteria for potential amalgamation of rating units**
- Test for rating units where:
- (a) **N** (No) is displayed in the DVR in the **additional certificate of title** field, and the words **Bach** or **Hut** or **Crib** or **Boat Shed** appear in the legal description
- 

**Note on baches, huts, and cribs**

Baches, huts, and cribs held by licences on land that has been reserved for road do not qualify as rating units in their own right.

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*Continued on next page*

## Rating unit compliance, continued

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**New rating  
unit not  
created**

- (a) The TA should record the reasons for not creating new rating units or amalgamating existing rating units. This avoids repeating explanations in future audits.
  - (b) The **Filler** field of the property audit file may be used for this purpose.
-

## 4. Exceptions to rating unit compliance testing

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**Refer to** Rules 2.4.1.2 and 2.4.2.2

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**Exceptions to testing** The following are guidelines to the exceptions in the Rules that allow two or more CTs or instruments to constitute one rating unit.

<b>Topic</b>	<b>See page</b>
Substantial improvement straddles boundaries	15
Certificates of title legally required to be alienated together	15
Used as one farming operation	15

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*Continued on next page*

## Exceptions to rating unit compliance testing, continued

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### **Substantial improvement straddles boundaries**

- (a) Where a substantial improvement straddles certificate of title boundaries, the word 'substantial' should have regard to the added value the improvement gives to the property. It is not necessarily a measure of the size or physical nature of the improvement.
  - (b) A small garage over a boundary in an area with high land value may not be a substantial improvement, but it could be in an area with low land value.
  - (c) The asphalt seal of a supermarket car park may be a substantial improvement in terms of value.
- 

### **Certificates of title legally required to be alienated together**

- (a) Where CTs state they are legally required to be alienated together, this can be the basis for one rating unit.
  - (b) The requirements of a resource or building consent alone are not sufficient to apply this exception.
- 

### **Used as one farming operation**

- (a) This exception applies where land is used as one farming operation and it is likely that the certificates of title will be sold as one farming operation to obtain the maximum value.
  - (b) When applying this exception, the valuer should clearly identify the general market localities where lifestyle predominates over farming operation areas and vice versa.
  - (c) The highest and best use approach should be used for each separate title and the property category should be consistent with this approach. This means that **lifestyle** rating units cannot be combined into a single **rural** rating unit, regardless of common ownership or use.
  - (d) Actual use is not relevant when assessing individual titles for rating valuations.
-

# Special issues

## 5. Overview

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- Introduction**
- (a) Before beginning a revaluation it is important to identify any special issues that may affect the revaluation and need further research and analysis.
  - (b) These issues could be at a local or national level, and their impact on values may vary between districts.
- 

**Contents** This chapter contains the following topics, which are some examples of special issues:

<b>Topic</b>	<b>See page</b>
Water permits	17
Emissions trading schemes	21
Significant change in market dynamics	22
Māori freehold land	23
Leaky buildings	24
Property categories	25
GST	26

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## 6. Water permits

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**Refer to** Section 122 of the Resource Management Act 1991 (RMA)

---

**Introduction** The following matters relating to water permits should be considered and, where appropriate, information should be documented in the revaluation basis.

---

**Access to water**

- (a) Irrigation water is mainly accessed by holding an equitable interest in a private scheme or through a resource consent, usually called a water permit, issued by the regional council.
- (b) The valuer should comment on the sources of water in the district and provide a summary of the market expectations about the likelihood of obtaining irrigation water as at the effective date of valuation.

---

**Private schemes**

- (a) Private schemes are usually based around dams or wells.
- (b) Members in a private scheme have an equitable interest which allocates water to them.
- (c) The value of shares in a private scheme is not part of land or improvements value.
- (d) The valuer should comment on current or proposed schemes in or affecting the district, including private or joint venture schemes.

---

**Resource consents**

- (a) Water permits are a form of resource consent under the RMA.
- (b) Regional councils allocate water permits based on the number of applications and the availability of supply
- (c) Ground water allocation zone maps depict current allocations of water. A red zone denotes an area of full allocation.
- (d) Under s 122 of the RMA, a resource consent is not real or personal property, although it has similar characteristics to a chattel.
- (e) The valuer should comment on the current supply and demand for water permits at the effective date of valuation and provide copies of ground water allocation maps.

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## Water permits, continued

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### Valuing water permits

- (a) Where water permits are widely available then the value of irrigation water is inherent in the land value. This approach is supported by the Courts in *McKee v Valuer-General*.<sup>1</sup>
- (b) Where water permits are close to full allocation, the valuer should assess both the dry land value and the wet land value and calculate the chance of obtaining a water permit. This is a chance of change factor, that is, the chance of moving from dry land situation to fully irrigated land, expressed as a percentage. When calculating the chance of change, you should consider:
  - (i) whether an appeal to the Environment Court regarding a regional council's declining of a resource consent application for supply of water rights will be successful,
  - (ii) what other schemes are or will soon be available to supply water, and
  - (iii) the chance of water reallocation by the regional council.
- (c) If water permits are fully allocated then land value should be assessed as dry land with any slight chance of change. Refer to the diagram on the next page.
- (d) The cost of obtaining or replicating a water permit, as at the date of valuation, is a chattel element and not included in rating valuations as an improvement. However, any residual value effect over the cost of obtaining the water permit can be included in the valuation as an improvement in fully allocated red zones.
- (e) In fully allocated areas, the added value the water permit unlocks above the dry land value and the cost of obtaining the consent becomes an improvement. Note that the value of improvements reflects the chattel effect element. This is similar to the machinery effect allowed in both the *ECNZ* and *Telecom Auckland Ltd v Auckland City Council*.<sup>2</sup>
- (f) Rural rating units that have a ground water permit should be individually identified in order to assess any added value of improvements. This added value could be applied on a district average approach in the first instance.
- (g) Any additional fertility in land as a consequence of historic water availability is assessed in the land value.

---

*Continued on next page*

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<sup>1</sup> [1970] NZLR 760 (High Court) and [1971] NZLR 436 (Court of Appeal)

<sup>2</sup> [1995] 3 NZLR 489

## Water permits, continued

---

**Worked  
example:  
valuing water  
rights**

On the following page there are two worked examples for valuing water rights in a fully allocated red zone.

---

## VACANT RURAL LAND IN A RED ZONE

**Example 1: Land with historic water and higher current fertility**

<b>\$2.2 million total value-irrigated land*</b>													
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;"></td> <td style="width: 50%; text-align: center;">\$500,000 chattels/other</td> </tr> <tr> <td style="width: 50%;"></td> <td style="width: 50%; text-align: center;">\$300,000 VI</td> </tr> <tr> <td style="width: 50%; text-align: center;">CV \$1.7 million</td> <td style="width: 50%; text-align: center;">\$1,400,000 LV</td> </tr> </table>		\$500,000 chattels/other		\$300,000 VI	CV \$1.7 million	\$1,400,000 LV	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; text-align: center;">actual cost of getting water, via trade or consent</td> <td style="width: 50%;"></td> </tr> <tr> <td style="width: 50%; text-align: center;">chattel effect</td> <td style="width: 50%;"></td> </tr> <tr> <td style="width: 50%;"></td> <td style="width: 50%; text-align: center;">dry land (value higher to reflect current fertility)</td> </tr> </table>	actual cost of getting water, via trade or consent		chattel effect			dry land (value higher to reflect current fertility)
	\$500,000 chattels/other												
	\$300,000 VI												
CV \$1.7 million	\$1,400,000 LV												
actual cost of getting water, via trade or consent													
chattel effect													
	dry land (value higher to reflect current fertility)												

\*The above value representations do not include the irrigation plant or any other improvements.

**Example 2: Land with recently gained water; fertility still unaffected**

\$2.0 million total value-irrigated land								
(this entire value would be attributed to 'land value' in an area without red zone limitations)	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;"></td> <td style="width: 50%; text-align: center;">actual cost of getting water, via trade or consent#</td> </tr> <tr> <td style="width: 50%;"></td> <td style="width: 50%; text-align: center;">chattel effect</td> </tr> <tr> <td style="width: 50%;"></td> <td style="width: 50%; text-align: center;">dry land (including slight chance of water)</td> </tr> </table>		actual cost of getting water, via trade or consent#		chattel effect		dry land (including slight chance of water)	
		actual cost of getting water, via trade or consent#						
		chattel effect						
	dry land (including slight chance of water)							
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;"></td> <td style="width: 50%; text-align: center;">\$500,000 chattels/other</td> </tr> <tr> <td style="width: 50%;"></td> <td style="width: 50%; text-align: center;">\$300,000 VI</td> </tr> <tr> <td style="width: 50%; text-align: center;">\$1,200,000 LV</td> <td style="width: 50%; text-align: center;">CV \$1.5 million</td> </tr> </table>		\$500,000 chattels/other		\$300,000 VI	\$1,200,000 LV	CV \$1.5 million	Total 'value' of water \$800,000	
	\$500,000 chattels/other							
	\$300,000 VI							
\$1,200,000 LV	CV \$1.5 million							

#The proportions of chattel effect vs actual cost are an example only and would require location-based research to qualify in each instance

## 7. Emissions trading schemes

---

### **Matters to consider**

The following matters and their effect on highest and best use should be documented in the revaluation basis.

- (a) demonstrate an understanding of the New Zealand Emissions Trading Scheme (ETS), in relation to forestry
  - (b) current legislation relating to carbon credit or emissions trading schemes
  - (c) the effect of milling tax on established forests, taking into account the highest and best use
  - (d) profile forestry rating units in the district in relation to determining:
    - (i) age of trees, that is, pre- and post-1990
    - (ii) mix of trees, that is, exotic and indigenous
    - (iii) land area
    - (iv) any publicly notified exemptions
    - (v) allocation of emission units for forestry in the district
  - (e) detailed sales analysis of forestry property, showing treatment of any emissions units included, if applicable
  - (f) demonstrate an understanding of the market for forestry land in the district in the new ETS environment. Identify market trends for land with or without emission units.
-

## 8. Significant change in market dynamics

---

**Introduction** A significant change in market dynamics is any situation where value changes since the last revaluation differ considerably from the prevailing market conditions at the date of valuation. The change may be the result of a one-off event or a new market trend.

---

**Matters to consider**

- (a) Where any of the events set out below as examples have occurred since the last revaluation, there may be a significant change in market dynamics and the valuer should record any impact in the revaluation basis.
- (b) As categories are based on highest and best use, any significant change in market dynamics has potential to affect both values and property categories.

---

**Examples** The following are some examples of events that may cause a significant change in market dynamics.

- (a) conversion of **pastoral** to **dairy**
  - (b) conversion of **forestry** to **pastoral**
  - (c) land banking in anticipation of zoning changes
  - (d) change in pedestrian counts and retail preferences
  - (e) new bulk retail areas where land was previously low level commercial, industrial, or residential
  - (f) impacts of a significant public work, for example:
    - (i) a new highway, or a prison opening or closing, or
    - (ii) resizing of a significant employer or business relative to the district, such as a freezing works, large-scale manufacturer, or tertiary institution
  - (g) in a depressed market, **vacant industrial** lots with a house on-site reverting to **residential dwelling**.
  - (h) a natural disaster that significantly reduces demand and values for certain property types or locations. In the case of earthquakes this may affect buildings that are below acceptable strengthening standards or land prone to liquefaction. In these cases, valuers need to identify and analyse sales to determine the extent of market discounts and to identify the characteristics of these property types so that unsold properties can also be valued appropriately.
-

## 9. Māori freehold land

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**Refer to** Te Ture Whenua Māori Act 1993/Māori Land Act 1993

---

**Information gathering** Plan how information about Māori freehold land, as defined in the Te Ture Whenua Māori Act 1993, will be sourced and recorded in the revaluation basis.

---

**Documentation** The valuer should provide evidence of the following.

- (a) how Māori freehold land and Māori customary land subject to the Te Ture Whenua Māori Land Act 1993/Māori Land Act 1993 has been identified, including any Māori Land Court records
  - (b) a list of the relevant rating units
  - (c) in the case of Māori freehold land and the application of the judgement in *Valuer-General v Mangatu Inc*<sup>3</sup>, how the following have been recorded:
    - (i) the number of owners
    - (ii) any sites with special cultural significance and what type of significance has been accorded
  - (d) current and proposed values
  - (e) the adjustment allowance, showing the percentages applied per rating unit and the reasons for applying those percentages
  - (f) reference to relevant case law or Land Valuation Tribunal decisions
  - (g) any Māori freehold land subject to an occupation or equivalent order.
- 

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<sup>3</sup> [1997] 3 NZLR 641. For guidance notes on applying this case, type 'Mangatu' into the search box in the top right-hand corner of the LINZ website: <http://www.linz.govt.nz/>

## 10. Leaky buildings

---

- Introduction**
- (a) The New Zealand construction industry has been criticised recently because of increased numbers of leaky buildings.
  - (b) These leaky buildings are a result of changes in the 1990s to building laws, design innovations, and project management practices.
  - (c) The cost of repairing leaky buildings has led to increased litigation and resulted in significant legislative changes to provide consumer protection.
  - (d) The valuer needs to be aware that buildings of a certain design type and constructed of particular materials have been identified by the market as high-risk and rating values need to take account of this.
- 

- Matters to consider**
- The valuer should record the following information in the revaluation basis:
- (a) what research has been carried out to identify any leaky buildings in the district
  - (b) any agencies, councils, and other parties contacted to identify leaky buildings
  - (c) the valuation approach for any leaky buildings in the district.
- 

- DVR treatment of leaky buildings**
- (a) Leaky buildings that are recorded on a council register should be individually assessed for each revaluation. If a leaky building on the register is not individually assessed for a revaluation and an issue subsequently arises during the currency of the roll then this should be treated as an error in accordance with s 15 of the RVA.
  - (b) Leaky buildings that are not on a council register and only become apparent during the currency of the roll should be treated under s 14 of the RVA as a roll maintenance value change through improvements being removed from the land.
  - (c) Leaky buildings will generally have the Code R or F for external wall construction in the Land Use Data field of the DVR.
  - (d) Valuers must also identify individual leaky building sales and analyse them carefully to determine the extent of any price discounting by the market. They also need to understand the common characteristics of leaky buildings and apply any general market stigma discounts to properties that have not sold.
-

# 11. Property categories

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**Introduction** The following guidelines are provided to help valuers decide what property category to use, based on the concept of highest and best use.

---

**Market changes between revaluations**

- (a) It is necessary to review all property categories where the market, and therefore the highest and best use, has changed since the last revaluation. A property category should always reflect the highest and best use given the particular market conditions as at the date of revaluation. Refer also section 29 on indexing, for further comment on this.
- (b) Where a category warrants changes between valuations, it is important to review the added value of improvements, which may decrease or increase depending on the category chosen, eg redundant horticultural going to lifestyle.

---

**Health-care properties**

- (a) OH should be used where the best use is a large-scale health-care operation, such as a hospital.
- (b) CH should be used where the best use is a small-scale, specialised health-care operation, such as a purpose-built medical facility, eg a veterinary clinic.

---

**Education properties**

- (a) OE should be used where the best use is a traditional education facility, such as a public school.
- (b) CK should be used where the best use is a commercial orientated specialised education facility, such as a purpose-built childcare centre.

---



## 12. GST

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### **Introduction**

The following guidelines are provided to help valuers with the treatment of GST in rating valuations.

---

### **GST in valuations**

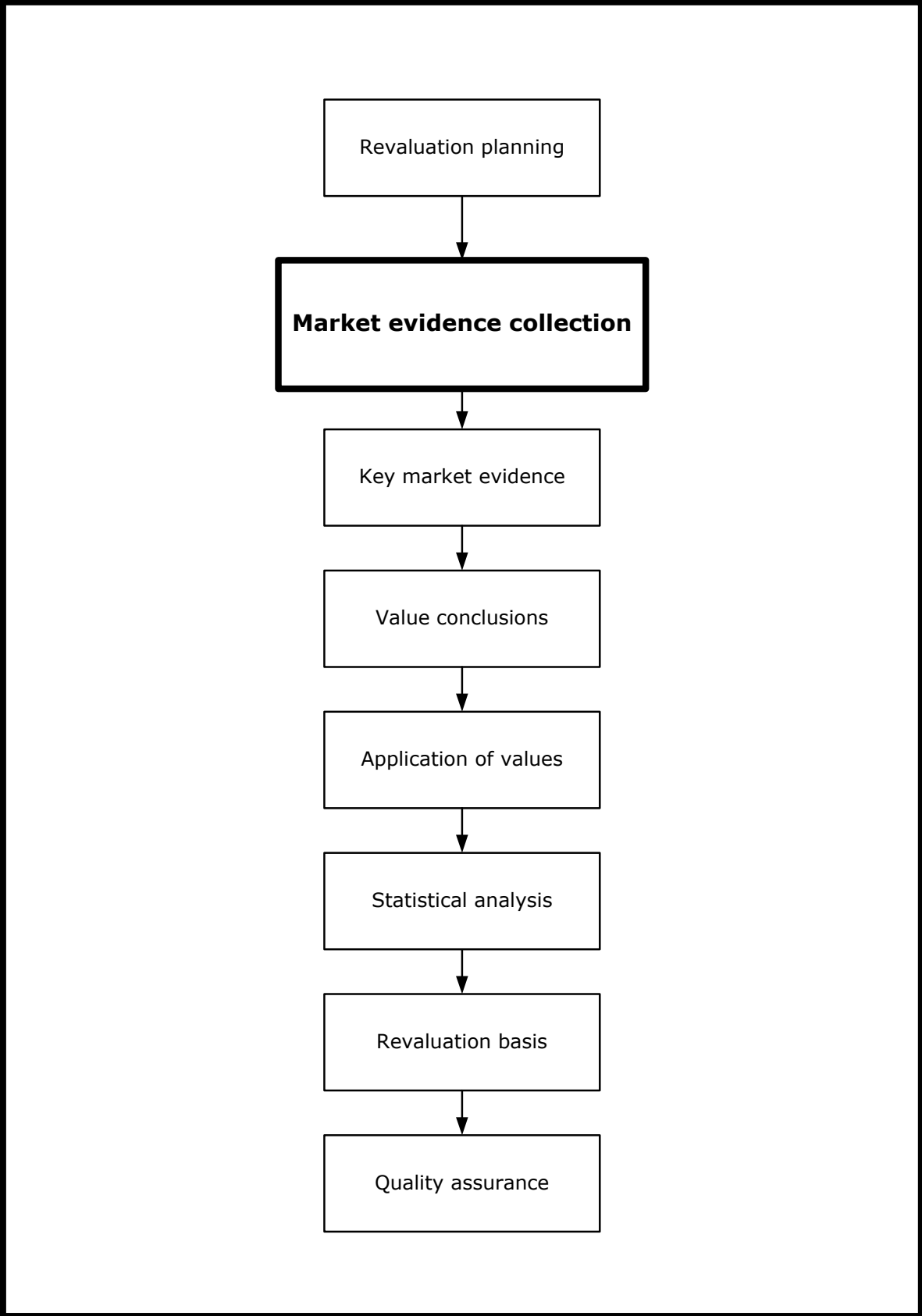
There can only be one market value not two. Market value cannot be different depending on whether or not GST is payable or claimable by the purchaser. GST does not alter the market value but it could alter the net return to an individual vendor. In accordance with the PINZ Valuation Standards, residential and lifestyle properties are generally assessed inclusive of GST and all other property types are assessed exclusive of GST.

---

### **GST in sales analysis**

Valuers need to determine the GST position of parties in individual sales for non-residential/lifestyle transactions and identify what, if any, GST was paid. Where GST has been paid above the current market value of a property then this amount needs to be removed from the gross sale price before analysis.

---



# Market evidence collection

## 13. Overview

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- Introduction**
- (a) There are a number of types of evidence that can be used to show that proposed values reflect prevailing market conditions.
  - (b) Confirmed sales are those that have been notified to the TA and this is the best form of market evidence.
  - (c) Unconfirmed sales, and non-sales evidence, including rental evidence, are generally considered to be less conclusive market evidence than sales.
- 

- Examples of relevant market evidence**
- The following are examples of relevant market evidence.
- (a) confirmed sales
  - (b) unconfirmed sales
  - (c) rental evidence
  - (d) asking prices, from real estate listings
  - (e) commentary by valuation firms on changes in value levels
  - (f) real estate commentary, for example days to sell, number of properties on the market, and vacancy rates
  - (g) PINZ commentary on topics such as pedestrian counts.
- 

**Contents** This chapter covers the following topics:

<b>Topic</b>	<b>See page</b>
Sales evidence	31
Non-sales evidence	38

---

# Sales evidence

## 14. Overview

---

**Refer to** Appendix A.2, Appendix G

---

**Introduction**

- (a) Sales evidence is the lifeblood of a revaluation. Careful attention is required to:
  - (i) distinguish market from non-market evidence, and
  - (ii) identify sale properties where the mass appraisal and land use data in the DVR do not match the physical attributes.
- (b) Individual market sales of rating units form the basis of any statistical testing for a revaluation. Refer to page 89 for more on statistical analysis.

---

**Contents** This section contains the following topics:

<b>Topic</b>	<b>See page</b>
Property inspections—sold or leased properties	30
Sales classification	31

---

## 15. Property inspections—sold or leased properties

---

**Refer to** Rule 5.6.1, Appendix G

---

**Introduction** Rule 5.6.1 requires valuers to demonstrate that a sufficient number of sold or leased properties have been inspected to determine market levels at the effective date of valuation.

---

**Sufficient inspections**

- (a) Where there are large volumes of sales evidence for a property type or location, most of the inspections should be carried out on recent sales and any outlier sales.
- (b) Where there are limited sales for a property type, sufficient sales inspections may mean all sales since the last revaluation, and may include sales from another district.

---

**Documentation** The following information should be provided to demonstrate that sufficient inspections have been carried out.

- (a) the factors used by the VSP to decide which sold or leased properties to inspect, for example:
  - (i) statistical fit of current and proposed values to recent market sales evidence
  - (ii) ratio of market to non-market sales
  - (iii) number of S12 sales. Refer to page 33 for more on the S12 sales classification.
- (b) how the inspections were carried out, eg roadside, on-site but external, or internal
- (c) the percentage of properties inspected in each broad category type.

---

## 16. Sales classification

---

**Refer to** Rule 5.6.1, Appendix A.2, Appendix G, Local Government (Rating) Act 2002

---

- Introduction**
- (a) Sales are the most important evidence of market levels at the effective date of valuation and it is essential that they are correctly classified in accordance with the Rules.
  - (b) Section 31(2) of the Local Government (Rating) Act 2002 requires vendors to notify TAs of sale prices.
  - (c) It is the valuer's responsibility to ensure the final accuracy of the sales classification.
- 

**Contents** This section contains the following topics:

<b>Topic</b>	<b>See page</b>
Sales classification system	32
S11 sales classification criteria	32
S11 sales classification guidelines	32
S12 sales criteria	33
S12 sales classification guidelines	33
S13 sales criteria	34
S13 sales classification guidelines	35
Sale type M: Multi-sale	36
Unconfirmed sales	36

---

*Continued on next page*

## Sales classification, continued

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### Sales classification system

Appendix G of the Rules sets out the codes that must be used for the sale type, sale tenure, and price/value relationship fields in the sales audit file. These three codes are used together to describe the sales classification.

---

### S11 sales classification criteria

The following diagram summarises the criteria for classifying a sale as S11:

sale type	→	whole rating unit	→	code = S	} The sale would be classified as <b>S11</b>
sale tenure	→	freehold	→	code = 1	
price/value relationship	→	arm's length at a market price which can be matched with the rating unit information	→	code = 1	

---

### S11 sales classification guidelines

- (a) S11 sales form the basis of the statistical tests.
  - (b) A review of S11 sales should be carried out to ensure that where there is a large variance between sale price and current or proposed capital value, this is identified and explained. Sales with wide variance between sale price and current or proposed value will always be a focus of a revaluation audit.
  - (c) For sales that occur near the effective date of valuation, there should be a close correlation between S11 sale prices and proposed values.
- 

*Continued on next page*

## Sales classification, continued

---

### S12 sales criteria

The following diagram summarises the criteria for classifying a sale as S12:

sale type	→	whole rating unit	→	code = S	} The sale would be classified as <b>S12</b>
sale tenure	→	freehold	→	code = 1	
price/value relationship	→	arm's length where the physical attributes of the property sold may not match the rating unit information recorded in the DVR, and a further review of the sale is required	→	code = 2	

---

### S12 sales classification guidelines

- (a) A sale should be classified S12 if the:
  - (i) price indicates a significant and unexplained variance from the general ratio of sale prices to current capital values for that category type at the date of sale, or
  - (ii) the valuer knows that improvements have been made to the sale property which are not yet entered in the DVR.
- (b) There should be no S12 sales classifications as at 30 June of each year or at the time of revaluation.
- (c) Market sale properties that show a significant variance between price and capital value but do not show any change to the physical attribute information entered in the DVR, should be recorded for review at the next revaluation. These sales may indicate the need for a wider review of values in the general location or property type, or more inspections.

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*Continued on the next page*



## Sales classification, continued

---

### Review of S12 classifications

The S12 classification is only entered as an interim measure. These sales should be inspected at regular intervals and have the:

- (a) capital value altered, if improvements have been added or removed from the property (refer to rule 4.2.2). The DVR would be updated to reflect the physical condition of the property at the date of sale, the new capital value would be assessed, and the classification altered to S11 for market sales; or
  - (b) sales classification changed to S11 with no adjustment to current value if there has not been any physical change to the property, and it is a market sale; or
  - (c) sales classification changed to S13 if it is a non-market sale. Any improvements not yet entered in the DVR should be addressed before changing the classification to S13.
- 

### Examples of applying the S12 classification

- (a) The S12 classification parameters need to be adjustable to ensure that they move up or down with changes in the market.
  - (b) If sales indicate a market is on average 30 % above the current capital values, then S12 sales could be those with a ratio of less than a 10 % increase or greater than a 50 % increase, depending on the valuer's analysis of the market conditions.
  - (c) If in the above example the market changes to an average 150 % increase over current capital values, then the S12 parameters could be altered to 120 % and 180 % respectively for sales in the relevant date range, again subject to the valuer's analysis of the market conditions.
- 

### S13 sales criteria

The following diagram summarises the criteria for classifying a sale as S13:

sale type	→ whole rating unit	→ code = S	} The sale would be described as <b>S13</b>
sale tenure	→ freehold	→ code = 1	
price/value relationship	→ sale which should never be matched with the rating unit's	→ code = 3	

---

*Continued on next page*

## Sales classification, continued

---

### **S13 sales classification guidelines**

- (a) S13 sales are not suitable evidence to rely on for a revaluation.
  - (b) A sale should be classified S13 if the sale circumstances do not meet the definition of an arm's length transaction.
  - (c) The S13 classification can also be used where there are other factors influencing the sale price which do not reflect the prevailing market conditions.
  - (d) The following lists are not exhaustive and contain examples of potentially valid and invalid non arm's length sales. Note that these situations depend on market dynamics.
- 

### **Examples of valid S13 classifications**

- (a) family sale
- (b) sale to a trust
- (c) related parties, including companies
- (d) adjoining owner who has paid above market price
- (e) mortgagee sale, or estate sale, provided the price is below the general market level for the type of property. Mortgagee sales or forced sales are not automatically classified as S13, as they may be indicative of market levels in depressed circumstances. In strong markets, mortgagee sales often sell at similar levels to other properties.
- (f) the lease does not reflect prevailing market conditions at the date of valuation, such as rental is above or below market levels
- (g) the level of vacancy is significantly different from market levels in an income-earning property.

Note that sales classified as S13 in the circumstances outlined in (f) and (g) above should still be analysed as part of the revaluation evidence. Refer to page 47.

---

### **Examples of invalid S13 classifications**

- (a) development, redevelopment, or future subdivision sale
  - (b) adjoining owner who paid at market level
  - (c) estate sale at market level
  - (d) addition or removal of improvements. These should be recorded as S12 sales and have current values reassessed to reflect the added value of the improvements.
- 

*Continued on next page*

## Sales classification, continued

---

### Valuer's remarks

The valuer's remarks field is a mandatory field in the sales audit file and the reason for classifying sales as non-market should be provided in this field.

---

### Sale type M: Multi-sale

- (a) Appendix G 2 sets out the codes which must be used for the sale type in the sales audit file.
  - (b) Sale type 'M' is used for multi-sales.
- 

### Guidelines on multi-sales

- (a) Multi-sales are not automatically non-market sales. The valuer should compare the total of all capital values of the rating units involved in the sale against the overall sale price and investigate the nature of the sale.
  - (b) The VSP should provide a comparison between current and proposed values for multi-sales.
  - (c) There is often a discounted price for purchase of multiple rating units. This means it is likely that the sum of the proposed revaluation CVs for the individual rating units will exceed the multi-sale price in a steady or rising market.
  - (d) The valuer should review proposed values for multi-sales and explain any variance from the aggregate sale price.
- 

### Unconfirmed sales

- (a) Unconfirmed sales are sales that are under contract but settlement has not yet been notified to the TA. These sales can be included in the basis but are not classified until they are formally notified.
  - (b) Confirmed sales are the preferred evidence to support a revaluation. Unconfirmed sales are an important second tier of evidence when confirmed sales volumes are low, or there are limited current sales for a specific property type around the revaluation date.
  - (c) Unconfirmed sales should be analysed in a similar manner to confirmed sales.
- 

*Continued on next page*

## Sales classification, continued

---

**Residual sales analysis** Where there is a shortage of vacant land sales, a residual analysis of improved sales may be necessary to support proposed values. Preference should be given to sales where the added value of improvements is a small component of the overall sale price. The added value of the improvements should be deducted from the sale price to leave an indicative vacant land equivalent sale price.

---

**National or interdistrict sales** The basis should include details of sales for property types that are marketed on a national basis, such as economic rural farms, hotels, motels, services stations, shopping malls, and resthomes.

---

# Non-sales evidence

## 17. Overview

---

- Introduction**
- (a) Non-sales evidence is any evidence other than sales that is relevant to the revaluation.
  - (b) The main types of non-sales evidence are rental evidence, asking prices, and surveys.
  - (c) There is no statutory requirement for non-sales evidence to be supplied to a TA but it may be requested under s 45 of the Rating Valuations Act 1998.
- 

**Contents** This section contains information on the following topics:

<b>Topic</b>	<b>See page</b>
Rental evidence	39
Asking prices	40
Surveys	42
Rural non-sales evidence	43

---

## 18. Rental evidence

---

**Refer to** Rule 5.6.1, Appendix A.3

---

**Gathering information** Some sources of rental evidence are:

- (a) questionnaires sent to property owners or tenants,
- (b) leasing agents and valuers, including their reports on rental trends, and
- (c) owners of substantial property.

---

**Preparing for audit** Before submitting rental evidence for audit, the VSP should check that:

- (a) the rental audit file is complete where annual value is maintained,
- (b) the category of each rating unit is consistent on the property and rental files and any exceptions are explained,
- (c) detailed market rental schedules are provided in the revaluation basis, and
- (d) recent market rentals for whole rating units have had working basis capitalisation rates applied to cross-check proposed values.

---

## 19. Asking prices

---

**Introduction** Where there are not enough sales to meet the criteria in rule 5.6.1, asking prices may help to determine proposed values at the effective date of valuation.

---

**Sources of asking prices** Some sources of asking prices include:

- (a) real estate agents and their publications,
- (b) the internet, and
- (c) newspapers.

---

**Analysis of asking prices**

- (a) A schedule of asking prices with relevant headings should be provided in the written basis. Refer to the next page for a table of suggested headings for a schedule of asking prices.
- (b) Clear justification should be provided to support the analysis of asking prices. The justification should include which agents were spoken to, and how the adjustment factors between asking price and likely selling price were determined.
- (c) The process for deducting a realistic negotiating margin between asking price and likely selling price, and a chattels allowance should be applied consistently.

---

*Continued on next page*

## Asking prices, continued

### Presentation in the revaluation written basis

The following table sets out suggested headings for presenting a schedule of asking prices in the revaluation written basis.

Heading	Acronym/ abbreviation	Details
Roll number	ROLL	valuation roll number
Assessment number	ASST	valuation assessment number
Suffix	SUFF	valuation suffix number
Address	ADD	situation address
Category	CAT	property category
Land area	AREA	land area
Floor area	FL AREA	total floor area of principal buildings, from land use data
Source	SOURCE	where the asking price came from
Asking price	AP	total asking price
Negotiating margin and chattels percentage deduction	% DEDUCT	the allowance made for negotiation and chattels shown as a percentage
Negotiating margin and chattels dollar deduction amount	\$ DEDUCT	the allowance made for negotiation and chattels, shown as a dollar amount
Expected net sale price	ENSP	expected sales price apportioned to real property
Capital value	CV	current capital value
Expected net sale price/capital value ratio	ENSP/CV	
Proposed capital value	RCV	proposed revised capital value
Expected net sale price/Proposed capital value ratio	ENSP/RCV	
Valuer's remarks	REMARKS	



## 20. Surveys

---

- Introduction**
- (a) Surveys are used to obtain additional market evidence for specific property categories and to identify any significant changes in use. This information is often required to ensure that the basis is comprehensive for audit purposes.
  - (b) There are a number of different approaches and styles to carrying out surveys.
- 

**Examples** The following are examples of information that could be obtained by a survey of rural, commercial, and industrial properties.

**Rural**

- (a) changes to land use patterns and farming types since the last revaluation
- (b) information about the management regime to assist determination of average efficient
- (c) specific factors relating to the different farming types

**Commercial and industrial**

- (a) information about the income earning components of a property
  - (b) specific factors relating to sub-categories of commercial and industrial
  - (c) vacancy levels in a building
  - (d) incentives offered to attract tenants
  - (e) this information may also be relevant for residential income earning properties.
-

## 21. Rural non-sales evidence

---

### **Gathering information**

Some sources of rural non-sales evidence include:

- (a) valuers and real estate agents,
  - (b) land use and performance questionnaires sent to properties that have an economic level of production,
  - (c) data on rural value movements, and
  - (d) farming publications.
- 

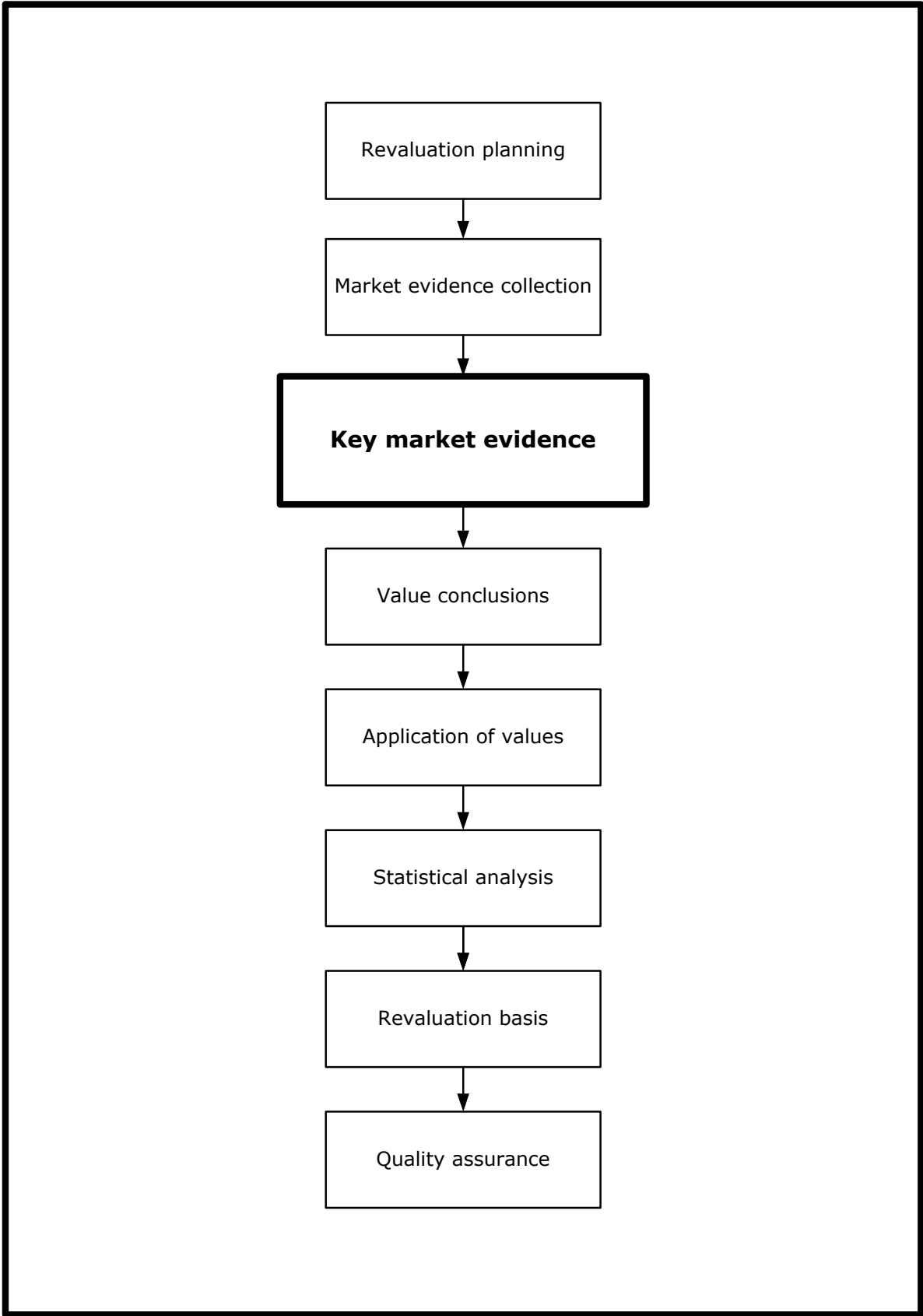
### **Analysis**

Analysis of rural non-sales evidence should be consistent with the definition of average efficient management for the district. This approach should be used to check and maintain individual property production levels and to analyse sales within the district.

---

### **Determining average efficient management**

- (a) The definition of average efficient management for a district should be based on a review of the information gathered above.
  - (b) Average efficient management may vary between districts and the criteria for determining it should be clearly explained for each broad economic rural category in the district. Adjustments to actual production figures on a particular property may be required to reconcile it with average efficient. This is necessary depending on whether the operator is either consistent with the prevailing regime and/or whether they perform above or below industry averages.
  - (c) Below is a general guide as to what constitutes an economic property under different average efficient farming regimes:
    - (i) A dairy farm managed on a milking platform basis (where the total effective area of the farm is used for milk production, plus all young stock are grazed off, the milking herd is grazed off during winter and some supplementary feed brought in) – historical guide to average efficient is approximately 50 000 kilograms of milk solids per annum.
    - (ii) A dairy farm managed on a self contained basis (where all stock remain on the farm throughout the year, supplements are produced on the property, and a maintenance level of fertilizer is applied) - historical guide to average efficient is approximately 35 000 kilograms of milk solids per annum.
    - (iii) A pastoral farm – historical guide to average efficient is approximately 3000 stock units.
-



# Key market evidence

## 22. Overview

---

**Refer to** Rule 5.4

---

**Introduction**

- (a) Once market evidence has been collected, the key market evidence must be determined.
- (b) Key market evidence is a subset of all evidence gathered. It is the evidence that the valuer considers best reflects prevailing market conditions and justifies the proposed values.

---

**Contents** This chapter contains the following topics:

<b>Topic</b>	<b>See page</b>
Examples of key market evidence	46
Inspection of key market evidence	47
Marketing history of sale or lease	61
Additional information about key market evidence	62

---

## 23. Examples of key market evidence

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### **Examples of key market evidence**

The following is a non-exhaustive list of evidence that could be key market evidence.

- (a) recent sales or leases close to effective date of valuation
  - (b) any sales or leases where few other transactions have occurred since the last revaluation
  - (c) sales or performance details of economic rural properties where production is close to average efficient levels
  - (d) sales or income details of investment properties where rentals and lease conditions are close to prevailing market conditions
  - (e) sales or leases of properties with special characteristics, for example hotels, motels, petrol stations, and freezing works. This information could be sourced from outside the district.
  - (f) multi-sales, if those sales are an indication of prevailing market conditions
  - (g) new leases with rentals that are at market levels
  - (h) asking prices and asking rentals where there are limited sales or new leases
  - (i) specific publications about market dynamics, such as vacancy rate changes, pedestrian count changes, and changes in milk solids payout levels.
-

## 24. Inspection of key market evidence

---

**Refer to**

Section 21 of the Rating Valuations Act 1998

---

**Inspection**

- (a) All properties that are used as key market evidence should be adequately inspected, and the relevant DVR data fields checked and amended for accuracy if necessary.
  - (b) Properties used as key market evidence should be internally inspected. The date of inspection and the names of any people spoken to should be recorded.
  - (c) The valuer's knowledge of key market evidence needs to be thorough as it may be tested at audit, before the Land Valuation Tribunal, or at a higher level.
- 

**Adjustment of key sale prices**

- (a) It is expected that key sale prices will be analysed and adjusted to remove the impact of any elements that are not typical of the prevailing market conditions for that type of property as at the date of sale.
  - (b) Case law has confirmed that rating valuations are subject to unique valuation principles which can differ from those used for valuations that are not for rating purposes.
  - (c) Section 21 of the RVA states how to value a rating unit that is subject to a lease. Properties with comparable location and physical attributes need to have uniform values, irrespective of ownership arrangements and lease circumstances. Therefore, the sale price of a property with a rental above market levels should be adjusted down and if the rental is below market levels, the sale price should be adjusted up.
- 

*Continued on next page*

## Inspection of key market evidence, continued

---

**Adjusting sale prices** The following example of sales analysis compares the market level of rental at sale date with the above market component, then present values the excess rental for the remaining term of the lease. The present value benefit rental is then deducted from the sale price to give an adjusted market value. Generally it is acceptable to present value rental benefits for up to eight years from the sale date, beyond this point the reliability of the benefit factor becomes questionable.

---

**Example** Attached is an example to illustrate the process.

The sale price was \$12,590,000 on a passing net rental of \$1,301,429, showing a passing yield of 10.34 %. The above market component of excess rental when present valued at a discount rate of 9 % shows \$4,316,724. This figure is deducted from the actual sale price of \$12,590,000 to give an adjusted sale price of \$8,273,276. The prevailing market level of net income is \$563,412 and this figure when divided by the adjusted sale price gives a market yield of 6.81 %.

---

### Sales analysis

VAL reference:	17260 06700			
Address	160 Lambton Quay			
Building name	Valuation House			
Sale date	14/06/09			
Sale price	\$12,590,000			
Comments	1987 retail/office bdlg 12 levels, good space, 16 cpks, 2lft, a/con			
Summary of analysis from next page	Market TOC per annum	\$978,412		
	Outgoings	\$415,000		
	Market net income	\$563,412		
	Market net income	\$563,412		
	Adjusted sale price	\$8,273,476	Cap rate	6.81 %
	Actual net income	\$1,301,429		
	Actual sale price	\$12,590,000	Cap rate	10.34 %

Tenant	Level	Area (PSM)	Lease start	Lease finish	Actual TOC PSM	Actual TOC PA	Market TOC PSM	Market TOC PA	Diff/Mnth	Mnth to expire	P.V. of diff
NZ Post	GRD + MEZZ	201.8	01/08/02	01/02/2017	\$530.93	\$107,142	\$375	\$75,675	(\$2,622)	98	(\$182,332)
Dominion Breweries	GRD	335.8	01/08/01	01/08/2031	\$472.96	\$158,821	\$245	\$81,500	(\$6,443)	266	(\$746,573)
Landcorp	L1-11 + CPKS	3879.7	08/05/02	08/05/2016	\$379.08	\$1,470,717	\$210	\$814,737	(\$54,665)	83	(\$3,387,819)
2 casual cpks			MTHLY	MTHLY		\$6,500		\$6,500	\$0		\$0
TOTALS		4417.3				\$1,743,179		\$978,412	(\$63,731)		(\$4,316,724)

Discount rate used in calculating PV 9.00%

OUTGOINGS	Rates	\$5,700,000	0.028	\$159,600
				\$0
	Opex	\$58	4416.93	<u>\$256,182</u>
				<u>\$415,782</u>



## 25. Sales analysis and presentation of key market evidence

---

### Analysis of key market evidence

- (a) All key market evidence should be individually analysed and the analysis provided in the working basis.
  - (b) The analysis should quantify the important benchmark indicators for the property type. For example, in rural sales this should include a full breakdown of dollars per hectare applied to the various land classes, along with a breakdown of values of the various improvements.
- 

### Schedules

- (a) A comprehensive schedule should be provided for key market evidence for each broad category and sub-category as appropriate, for example retail, offices, motels, rest homes, petrol stations, kiwifruit, and vineyards.
  - (b) Refer to the guidelines on the working basis for an explanation of how this information should be used. See page 80.
- 

### Example schedules

This section contains examples of headings for schedules of key sales and rental evidence.

Example schedule	See page
Example of a sales schedule: common headings	51
Example of a sales schedule: rural	52
Example of a sales schedule: lifestyle	54
Example of a sales schedule: commercial and industrial	56
Example of a sales schedule: residential	57
Example of a sales schedule: 'other	58
Example of a rental schedule: commercial and industrial	59

*Continued on next page*

## Sales analysis and presentation of key market evidence, continued

**Example of a sales schedule: common headings**

- (a) The following table sets out suggested headings common to all category types when presenting schedules of key sales evidence.
- (b) Additional headings specific to each broad category group are provided in the tables that follow.

Heading	Acronym/Abbreviation	Details
Roll number	ROLL	valuation roll number
Assessment number	ASST	valuation assessment number
Suffix	SUFF	valuation suffix number
Address	ADD	situation address
Category	CAT	property category
Land area	AREA	land area
Floor area	FL AREA	total floor area of principal buildings, from land use data
Sale date	DOS	date of agreement
Gross sale price	GSP	total sale price
Net sale price	NSP	sales price apportioned to real property
Analysed land sale price	ALSP	the land portion analysed from the net sale price
Chattels	CHATS	chattel component of sale price
Capital value	CV	current capital value
Land value	LV	current land value
Net sale price/capital value ratio	NSP/CV	
Proposed capital value	RCV	proposed revised capital value
Proposed land value	RLV	proposed revised land value
Net sale price/proposed capital value ratio	NSP/RCV	
Proposed capital value/capital value ratio	RCV/CV	
Valuer's remarks	REMARKS	any comments which help to explain the circumstances of the sale
Vendor and purchaser names		

*Continued on next page*

## Sales analysis and presentation of key market evidence, continued

**Example of a sales schedule: rural**

The following table sets out suggested headings, additional to those on page 51, for schedules of key economic **rural** property sales.

Heading	Acronym/Abbreviation	Details
Value of improvements	VI	current value of improvements
Other sale price	OTH	items included in the sale price which are not real property, eg dairy shares, timber, plant, and water rights. GST should also be itemised where applicable
Production	Prodn	the average efficient carrying capacity of the sale property. For dairy properties this is shown as kilograms of milk solids. For pastoral properties this is shown as stock units.
Analysed value of improvements	AVI	added value of the improvements portion analysed from the net sale price
Analysed net sale price per hectare	ANSP/ha	analysed net sale price divided by land area, in hectares
Analysed land sale price per hectare	ALSP/ha	analysed land sale price divided by land area, in hectares
Net sale price/production (for <b>pastoral</b> and <b>dairy</b> categories)	NSP/Prodn	net sale price per stock unit or per kilogram of milk solids
Analysed land sale price/production (for <b>pastoral</b> and <b>dairy</b> categories)	ALSP/Prodn	analysed land sale price divided by production being either kilograms of milk solids or stock units
Analysed land sale price /land value ratio	ALSP/LV	
Analysed land sale price /proposed land value ratio	ALSP/RLV	
Analysed value of improvements/value of improvements ratio	AVI/VI	
Analysed value of improvements/proposed value of improvements ratio	AVI/RVI	
Revised land value/land value ratio	RLV/LV	

Heading	Acronym/ Abbreviation	Details
Revised value of improvements/value of improvements ratio	RVI/VI	
Benchmark sale indicator	Benchmark	state <b>Yes</b> for those sales which are considered good indicators of prevailing market conditions

---

*Continued on next page*

## Sales analysis and presentation of key market evidence, continued

**Example of a sales schedule: lifestyle**

The following table sets out suggested headings, additional to those on page 51, for schedules of key **lifestyle** property sales.

Heading	Acronym/Abbreviation	Details
Value of improvements	VI	current value of improvements
Other sale price	OTH	items included in the sale price that are not real property, eg dairy shares, timber, plant, and water rights. GST should also be itemised where applicable.
Analysed value of improvements	AVI	added value of the improvements portion analysed from the net sale price
Mass total living area	MTLA	total living area
Net rate	NR	analysed dwelling net rate as component of sale price
Analysed site value	ASV	the analysed curtilage portion of the analysed land sale price. This is defined as the land around a dwelling house which incorporates the ancillary improvements to the dwelling. This may be enclosed by fencing.
Analysed residual land sale price per hectare	Resid LSP/ha	the residual land sale price per hectare once the curtilage area and its corresponding site value has been deducted
Analysed land sale price /land value ratio	ALSP/LV	
Analysed land sale price /proposed land value ratio	ALSP/RLV	
Analysed net sale price per hectare	ANSP/ha	analysed net sale price divided by land area, in hectares
Analysed total land sale price per hectare	ATLSP/ha	analysed land sale price divided by land area, in hectares
Analysed value of improvements/value of improvements ratio	AVI/VI	
Analysed value of improvements/proposed value of improvements ratio	AVI/RVI	
Revised land value/land value ratio	RLV/LV	

Revised value of improvements/value of improvements ratio	RVI/VI	
Benchmark sale indicator	Benchmark	state <b>Yes</b> for those sales which are considered good indicators of prevailing market conditions

---

*Continued on next page*

## Sales analysis and presentation of key market evidence, continued

**Example of a sales schedule: commercial and industrial**

The following table sets out suggested headings, additional to those on page 51, for schedules of key **commercial** or **industrial** property sales.

Heading	Acronym/Abbreviation	Details
Other sale price	OTH	items included in the sale price, which are not real property, eg plant, machinery, goodwill
Analysed land sale price/land area in square metres	ALSP/m <sup>2</sup>	
Net lettable area	NLA	the calculated net lettable area of the building or buildings
Sale price net rate	SPNR	net sale price divided by total floor area from land use data
Actual rent at date of sale	Act Rent DOS	details of passing rentals at time of sale
Market rent at date of sale	Mkt Rent DOS	estimated market rent at date of sale
Capitalisation rate on actual rent	CAP RATE	actual rent/net sale price
Adjusted net sale price	ADJ NSP	net sale price, less effective rental variance, eg over- or under-renting, vacancies, leasehold land adjustments
Capitalisation rate on adjusted sale price	ADJ CAP RATE	market rent/adjusted sale price
Adjusted sale price/capital value ratio	ADJ SP/CV	
Adjusted sale price/proposed capital value ratio	ADJ SP/RCV	
Revised land value/land value ratio	RLV/LV	
Benchmark sale indicator	Benchmark	state <b>Yes</b> for those sales which are considered good indicators of prevailing market conditions

*Continued on next page*

## Sales analysis and presentation of key market evidence, continued

---

**Example of a sales schedule: residential**

The following table sets out suggested headings, additional to those on page 51, for schedules of **residential** property sales.

---

Heading	Acronym/Abbreviation	Details
Analysed land sale price/land area in square metres	ALSP/m <sup>2</sup>	required for vacant land sales
Mass total living area	MTLA	total living area
Net rate	NR	analysed dwelling price/living area as recorded in the mass appraisal data
Revised land value/land value ratio	RLV/LV	
Benchmark sale indicator	Benchmark	state <b>Yes</b> for those sales which are considered good indicators of prevailing market conditions

*Continued on next page*



## Sales analysis and presentation of key market evidence, continued

---

**Example of a sales schedule: 'other'**

The following table sets out suggested headings, additional to those on page 51, for schedules of key **other** category property sales.

---

Heading	Acronym/Abbreviation	Details
Analysed land sale price/land area in square metres	ALSP/m <sup>2</sup>	required for vacant land sales
Building net rate	BNR	added value of main building/land use floor area
Revised land value/land value ratio	RLV/LV	
New category	New CAT	the revised category in instances where the property has changed to a new highest and best use since the sale. Comment on the value effect of any designation removal.

*Continued on next page*

## Sales analysis and presentation of key market evidence, continued

### Example of a rental schedule: commercial and industrial

The following table sets out suggested headings for a schedule of key market rental evidence for **commercial** or **industrial** property.

Heading	Acronym/Abbreviation	Details
Roll number	ROLL	valuation roll number
Assessment number	ASST	valuation assessment number
Suffix	SUFF	valuation suffix number
Address	ADD	situation address
Category	CAT	property category
Land area	AREA	legal land area
Floor area	FL AREA	total floor area of principal buildings from land use data
Net lettable area	NLA	the calculated net lettable area of the building or buildings
Date lease commenced	DLC	date lease first came into effect
Last rent review	LRR	
Term, rent reviews and rights of renewal	Term, RR & ROR	
Ratchet clause	RC	<b>Yes</b> or <b>No</b> as to whether a ratchet clause exists in the lease. This only allows the rent to remain the same or go up on review. It does not allow the rent to go down on review.
Face rental (and whether gross, semi-gross or net)	Face Rent	
Outgoings	OGS	Presented by each major component eg air conditioning, rates, management
Incentives analysis		analyse the value effect of incentives from face rent, eg rent free periods, and fit-out contributions
Rateable value effective rental	RVEf Rent	the face rental, less any incentives, converted to gross or net depending on method used for revaluation

<b>Heading</b>	<b>Acronym/ Abbreviation</b>	<b>Details</b>
Car parks	CPKS	car parks included in the rental and their analysed rental per week
Excess land	EL	excess land available to the tenant within the rental, being the amount apportioned to the land from the total rent
Building rental		analysed rental per square metre or per week
Individual building components rentals		where there is more than one use in a building space, eg office and warehouse, analyse the rentals for each component
Comparison to previous revaluation date	RVEfRent/Last Reval Rent	ratio of how the subject rateable equivalent rental compares to that applicable in the previous revaluation
Capitalised rental to check proposed value	Cap rent Value	recent market rentals for whole rating units should be capitalised at working basis rates to cross check proposed values

## 26. Marketing history of sale or lease

---

### **Matters to consider**

The valuer should be able to report on the marketing history involved with the sale or lease of properties that are used as key market evidence. Items to consider include:

- (a) how the property was sold or leased, for example auction, tender, asking price,
  - (b) whether the sale or lease was by agent or private treaty,
  - (c) the number of potential buyers or tenants,
  - (d) other offers made, including the number of offers and the price of the offer,
  - (e) the number of days the property was on the market,
  - (f) vendor or lessor circumstances, for example forced sale or lease, captive purchaser or tenant, or new lease,
  - (g) any sale and leaseback arrangements,
  - (h) if the purchaser is an adjoining owner or existing tenant. This is especially relevant in the **rural** and **commercial** categories,
  - (i) incentives, for example rent holidays, fit-out contributions, or vendor finance,
  - (j) payment of key money,
  - (k) resource consents in place,
  - (l) unique property characteristics that are not of a physical nature, eg historic places listings, and
  - (m) if there is a shortage of land sales, then a residual analysis of improved sales may be required using a consistent approach.
-

## 27. Additional information about key market evidence

---

**Introduction** This section provides guidelines for additional information that should be provided for the following categories:

<b>Category</b>	<b>See page</b>
Commercial and industrial: general	63
Dairy, pastoral, and specialist	65
Forestry	66
Horticulture	66
Lifestyle	66
Other	67
Residential	67

---

*Continued on next page*

## Additional information about key market evidence, continued

---

### **Commercial and industrial: general**

The valuer should consider the following items.

- (a) type of purchaser, for example owner-occupier or investor, corporation or individual
  - (b) lease conditions and rental at date of sale, including actual rental
  - (c) indicative market rental at date of sale.
- 

### **Commercial and industrial: detailed analysis**

- (a) Key sales should be analysed and sale prices adjusted to remove the impact of any rental shortfall or surplus.
  - (b) For leasehold properties, the value discount effect of ground rental should be added to the overall income to achieve a freehold equivalent sale price.
  - (c) Rentals that are subject to incentives should also be analysed from the face rental back to the effective rental to remove the impact of the incentives.
- 

### **Process for analysing effective rental**

1. Calculate the present value of the overall rental.
  2. Deduct the present value of the rent free period.
  3. Deduct the actual amount of the fit-out at day one as this is paid at the outset of the lease.
  4. Calculate the monthly payments required for the effective rental, and multiply by 12.
- 

*Continued on next page*

## Additional information about key market evidence, continued

### Practical example

<b>Valuation Tower</b>	
Lease commenced 1 May 2009	
Six-year term	
Three-year rent reviews	
<b>Rental:</b>	\$90,000 pa gross + GST
<b>Incentives:</b>	\$100,000 fit-out paid for by lessor
	Six months rent free
<b>Floor area:</b>	330 m <sup>2</sup> net
<b>Discount rate</b>	9.5 %. This reflects risk free rate, opportunity cost, and other risks in the economy.

5. Convert gross rental to a monthly basis
 

PMT: Payment = \$90,000 pa ÷ 12 = \$7,500 per month

D: Discount rate = 9.5% = 0.792 % per month (enter as the interest rate)

N: Term = 6 years x 12 months = 72 months
6. Compute PV (with payments made at the beginning of month)
 

PV = \$413,653 (contract rental)
7. Calculate rent-free period
 

PMT = \$7,500 per month

D = .792% per month

N = 3 months (use 3 months not 6, if the market allows a 3 month timeframe for changeover and fit-out period)

Compute PV = \$22,324 (value of rent-free over the term)
8. Contract rental (PV) \$413,653
 

- rent free (PV) \$22,324

\$391,329 effective rental excluding rent free period

*Continued on next page*

## Additional information about key market evidence, continued

---

**Practical example**  
continued

9. Calculate fit-out \$391,329
- \$100,000 fit-out lump sum cost at day one
- \$291,329 PV of effective rental over the term, excluding all incentives
10. Calculate the monthly payments:
- PV = \$291,329
- D = .792% per month
- N = 72 months
- PMT = \$5,282
- \$5282 x 12 months = \$63,384 pa (effective rental)
- \$63,384 ÷ floor area 330 m<sup>2</sup> = \$192 m<sup>2</sup>
- Contract (face) rental \$273 m<sup>2</sup>
- Effective rental \$192 m<sup>2</sup>
- 

**Dairy, pastoral, and specialist**

- (a) Where an index has been applied to CV, LV, or VI, key sales schedules should be presented in groups which clearly demonstrate the justification for the index bands.
- (b) If you have indexed on both LV and VI, the sales that justify these indexes should be analysed to show separate LV and VI ratios between sale prices and current values.
- (c) If key sales for economic rural properties show significantly different ratios to uneconomic rural properties, then the sales of the two property types should be grouped separately to show this clearly.
- (d) The value of any shares should be removed from the sale price.
- 

*Continued on next page*



## Additional information about key market evidence, continued

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### Forestry

- (a) The forestry market is not confined to district boundaries and forestry companies generally look nationally for suitable land for planting. As a result, national forestry sales should be recorded to justify proposed values within a district.
  - (b) The implications of any emissions trading schemes, and carbon taxes should be considered, and the impact identified in any sales analysis and proposed values.
  - (c) The revaluation of each rating unit should disregard the impact of any private third party rights and be the sum of the owner's interest. This means that forestry properties can be valued to recognise a higher alternative use even if cutting rights have been registered on the title.
  - (d) However, any impact of third party rights, such as cutting rights, on sale prices should be described in the analysis.
- 

### Horticulture

If the market for horticulture is marginal and the highest and best use could be lifestyle, any horticultural improvements may have a minimal added value.

---

### Lifestyle

- (a) It is recommended the valuer analyse the site value, or curtilage value, in sales of lifestyle blocks. This reduces the likelihood of cusp problems between residential and lifestyle properties.
  - (b) Balance land can be analysed per hectare as appropriate.
- 

*Continued on next page*

## Additional information about key market evidence, continued

---

### Other

- (a) The valuer should research sales of all **other** category properties since the last revaluation to establish whether the existing use is continuing.
- (b) A sale may indicate that a previous designation has now been lifted and any restriction to using the property in accordance with the underlying zone may have been removed.
- (c) This means that the highest and best use may have changed.

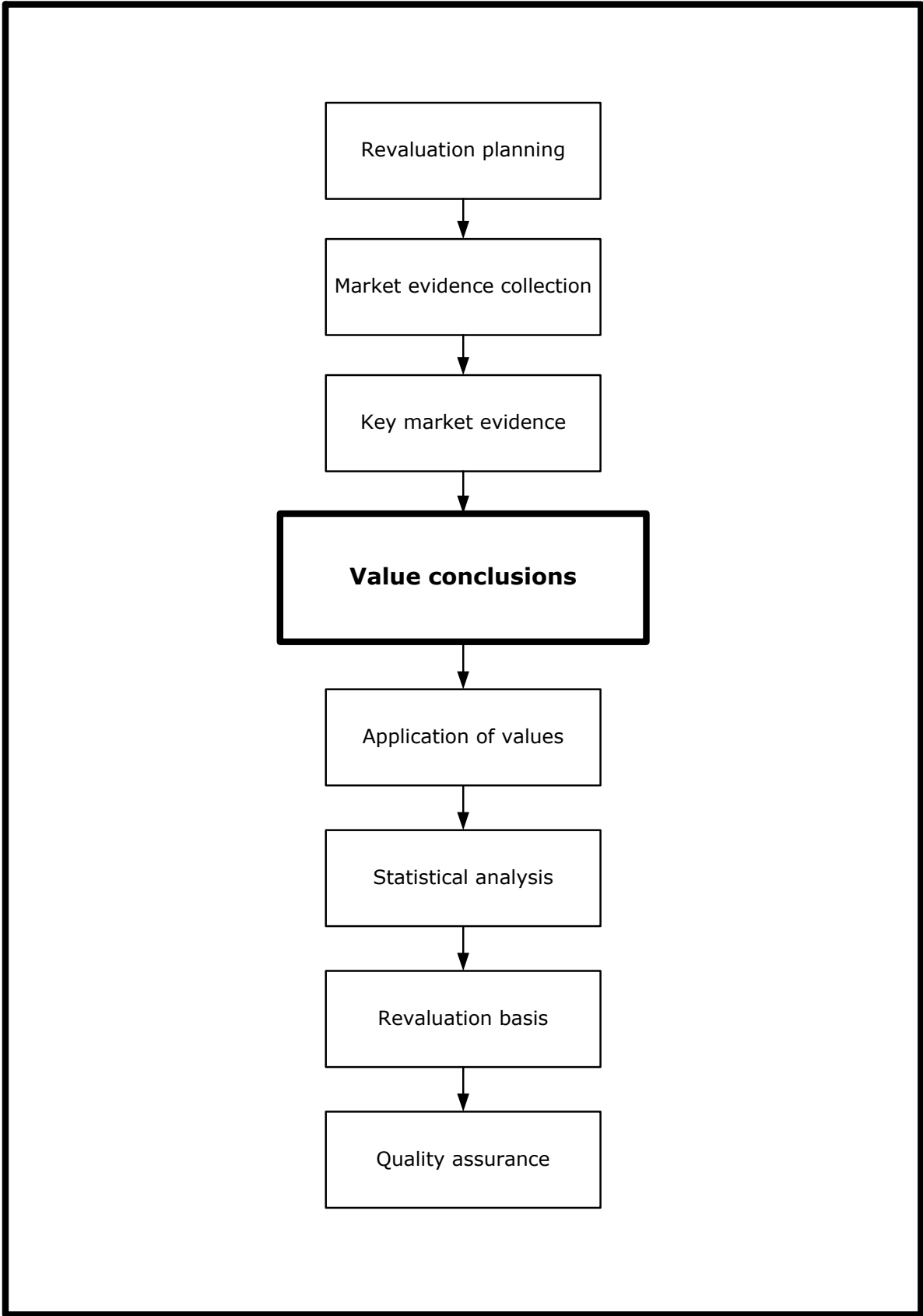
### Examples

- a church that has sold for conversion to a dwelling
  - a community hall that has sold for conversion to residential or commercial use
- 

### Residential

The valuer should analyse and provide evidence of:

- (a) land value at the date of sale,
  - (b) dwelling net rate,
  - (c) added value of other improvement components,
  - (d) capitalisation rates for income producing properties,
  - (e) sales of residential sub-categories, to identify any specific components or market dynamics that may differ from the general residential market, for example RC, RH, and RR compared to RD and RF.
-



# Value conclusions

## 28. Overview

---

- Introduction**
- (a) Once the key market evidence has been analysed, the valuer needs to make appropriate value conclusions and decide on the best way to apply the new values.
  - (b) The value conclusions will become the basis for justifying the proposed values and will need to be carefully documented.
  - (c) Where there is a close correlation between market evidence and current values it may be appropriate to apply the new values using a mass appraisal technique such as indexing with sufficient supporting inspection.
  - (d) Where there is not a close correlation between market evidence and current values the valuer may need to carry out more inspections and reassess proposed values individually.
- 

**Contents**

This chapter contains the following topics:

<b>Topic</b>	<b>See page</b>
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Cusp issues	75
Indexing not suitable	77
Market comments and conclusions	78

---

## 29. Indexing

---

- Introduction**
- (a) Indexing is a mass appraisal technique that is most commonly used where the current values of rating units are multiplied by a market analysed factor to establish initial proposed values.
  - (b) Indexing should only be used as an initial stage in applying the proposed values. Indexing usually requires follow-up inspections.
  - (c) Where the market has changed substantially since the last revaluation, further review and refinement of the initial indexes at a subcategory level may be required.
  - (d) Indexing can also be used to adjust the individual property attributes that make up the current values where there are detailed electronic worksheets.
- 

**Contents** This section contains the following topics:

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Deciding whether to index	71
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Link to evidence analysis	74
Using value indexing in conjunction with an alternative method of mass appraisal	74

*Continued on next page*

## Indexing, continued

---

### Check property categories before indexing

- (a) Consider whether the current property categories are relevant for the revaluation. Changing market dynamics since the last valuation may mean that categories should be changed for this revaluation.
  - (b) Rating valuation property categories must reflect the highest and best use and not the actual use, which may be different. See also Appendix F.1 of the Rules.
- 

### Examples of common category changes

- (a) RV or RD changing to RB in a strong market
  - (b) CM changing to IV in a weak market
  - (c) IV with a dwelling on the land reverting to RD in a weak market
- 

### Deciding whether to index

- (a) Generally, indexing is most suitable for **residential** and **lifestyle** properties. These types of property are more homogenous and there is usually more sales evidence to support the conclusions from this approach.
  - (b) You may be able to index the remaining categories; however this is generally more difficult due to the variance in individual property characteristics and a shortage of sales evidence.
  - (c) When deciding whether to index current values you should review the:
    - (i) adequacy of the volume of recent or relevant market evidence on which to base indexes. If there is a shortage of market evidence, it may be necessary to group evidence over a wider geographic area to justify proposed changes. Valuers should only make significant relativity changes from current values if there are sufficient sales volumes to clearly justify the changes; and
    - (ii) consistency between current values and sales. Ratios and statistical tests will indicate the degree of consistency. See below for more on consistency between current values and sales.
- 

*Continued on next page*

## Indexing, continued

---

### **Consistency between current values and sales**

- (a) If there is a high consistency of ratios between sale prices and current values and there are enough sales, then indexing could be used to establish the proposed values.
  - (b) If there are enough recent or relevant sales but low levels of consistency of ratios, then proposed values may need to be individually reassessed based on sales comparisons. The current values on the DVR may not be sufficiently accurate or uniform to support indexing.
- 

### **Evidence analysis for indexing**

- (a) It is recommended that you analyse market evidence in more than one way before deciding how to apply indexes. This allows the evidence to be explored thoroughly and tests alternative indexing specifications to get the best initial proposed values.
  - (b) The closer the initial index values are to the market evidence, the less manual adjustment will be required.
  - (c) You should always run a best fit analysis over the sales evidence. The line of best fit identifies where higher or lower value properties are moving at different value percentages within the same roll or sales group.
  - (d) This analysis will identify whether a single percentage index or a percentage index plus dollar lump sum will give the best statistical fit between the sales evidence and proposed values.
- 

### **If indexing is adopted**

- (a) If indexing is adopted, it is generally better to set a high index level. Significant variations in indexes should be avoided unless there is ample evidence to support them.
  - (b) High level or broad indexing is generally more reliable as a starting point than micro indexing.
  - (c) Micro indexing specifications may be difficult to justify without sufficient sales evidence and may be difficult to apply without causing cusp issues. Refer to page 75 for more on cusp issues.
- 

### **Micro issues**

Despite the above preference for broad indexes, it is also important to consider micro issues. This approach avoids indexes that are too general.

---

*Continued on next page*

## Indexing, continued

---

### Examples of micro issues

- (a) Unit title property values may be moving at a different rate to those with fee simple titles. For example, the values of apartment units may be moving at a different rate to stand-alone properties, or values of industrial units may be moving at a different rate to stand-alone industrial properties.
  - (b) Economic rural values may be moving at a different rate to marginally economic rural values.
  - (c) Commercial accommodation may be moving at a different rate to the general commercial market.
- 

### Inspections after indexing

- (a) After indexing, the results should be checked and individual changes made to values and other DVR data as appropriate. Lineflows, which are a line-by-line summary of the DVR data for individual rating units, are a common tool for this purpose.
  - (b) The lineflows should incorporate sufficient DVR data as well as the most recent sale to allow individual rating units to be adequately reviewed. Where changes are made in lineflows, the reasons for these changes should be recorded for audit purposes.
- 

### Indexing land values

- (a) Rating valuation methodology requires similarly zoned land to be valued in a consistent manner without taking into account the impact of improvements on value, to preserve uniformity.
  - (b) Land values must be assessed as if the land is vacant and not be influenced by actual use.
  - (c) Therefore, when indexing land values by category type, always check that the:
    - (i) zone is consistent with the category code, and
    - (ii) similarly zoned land is indexed consistently. If the land zone does not match the improved category then the property must be identified and the land value indexed at a level consistent with other properties of that zone in the locality.
- 

*Continued on next page*



## Indexing, continued

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### **Indexing when there is limited sales evidence**

- (a) When there is limited sales evidence, it is acceptable to individually assess the proposed values of a sample of unsold properties and compare the results against the current rating valuation to provide indicative index ratios.
  - (b) Index ratios calculated this way should always be cross-checked to the sales ratios and any relevant asking prices for properties on the market.
  - (c) The sample of unsold properties needs to cover a range of current values and be representative of the remaining properties to be indexed.
- 

### **Link to evidence analysis**

- (a) Index conclusions should be clearly linked to evidence analysis. For example, if the value of improvements is indexed then the sales analysis should include a value of improvements ratio which supports the index level adopted.
  - (b) If indexing land value, there should be a clear analysis of land sale prices, using both vacant land sales and the residual analysis of improved sales, if vacant sales are scarce, to support the index level adopted.
- 

### **Using value indexing in conjunction with an alternative method of mass appraisal**

- (a) Different indexing approaches can be used within a property category such as direct indexing of the existing values or indexing the individual property attributes that make up the current values where there are detailed electronic worksheets. Examples of the latter indexing include separate indexes applied to the current rents or capitalisation rates for individual uses of a commercial or industrial property eg retail, office, carparking etc or individual indexes applied to various land classes on a rural property.
  - (b) When more than one method is used, the methods should be reviewed to ensure they achieve similar, if not the same end result eg, if commercial properties are showing a 10 % capital value index conclusion, then it would not be appropriate to have the investment approach showing capitalisation rates unchanged, with rental rates increasing by 20 %, as this would give an end result of capital values increasing by 20 % for those properties this method was used on.
  - (c) Any use of the above mentioned alternative methods of mass appraisal should be clearly included on the same indexation summary schedule as the value indexes, and include a column showing the number of properties in a category affected by each adjustment method per roll or sales group.
-

## 30. Cusp issues

---

- Information**
- (a) A cusp is a situation where proposed values may not be logical or justified because different indexes have been applied that distort relativities between the current values of similar properties or groups of similar properties.
  - (b) Cusp issues as a result of indexing can occur in a number of different ways, for example:
    - (i) within a roll,
    - (ii) between adjoining rolls,
    - (iii) within similar category types,
    - (iv) between lifestyle and small rural productive properties or larger residential properties,
    - (v) between current CV and LV ranges, and
    - (vi) as a result of different index or mass appraisal techniques being used within a single property type.
  - (c) Management of cusp issues is necessary to prevent or mitigate situations where unjustified changes to the current value relativities are proposed. This is particularly important for rural categories to ensure that proposed values are logical and consistent for similar sized and quality properties.
  - (d) Cusp issues are more likely to occur when using micro indexes rather than broad indexes, so close monitoring is required.
  - (e) Percentage plus lump sum indexes based on best fit analysis generally avoid cusp issues as they graduate values in a consistent manner.
  - (f) The revaluation basis should include details of the process used to mitigate cusp issues caused by materially different indexes. The valuer should also include details of the sales evidence that supports the index variations.

---

*Continued on next page*

## Cusp issues, continued

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**Example of a cusp issue**

- (a) Micro indexing on the age of a house is often difficult to justify due to limited sales evidence, and can cause cusp issues between houses built in the last year of a decade and those built near the beginning of the next decade.
  - (b) Property buyers generally look at a range of properties within their price bracket rather than focus on a specific property factor such as the age of the dwelling.
  - (c) Current values on the DVR should already incorporate allowances for a dwelling's location, site characteristics, age, and quality of other improvements.
-

## 31. Indexing not suitable

---

### **Alternative to indexing**

- (a) If it is not suitable to index, individual values will need to be assessed.
  - (b) In this case, the valuer should quantify the necessary value variables to justify the proposed values.
- 

### **Examples of value variables**

- (a) The following are examples of value variables.
    - (i) range of residential net rates
    - (ii) commercial and industrial rents and capitalisation rates
    - (iii) rural land values per hectare or unit of production
    - (iv) added value of improvements.
  - (b) These value variables should be summarised as discussed later under the heading of working basis. Refer to page 80 for more on the working basis.
-

## 32. Market comments and conclusions

---

- Introduction**
- (a) Market comments and conclusions should provide an overview of each relevant market component.
  - (b) These comments and conclusions are a critical element in justifying proposed values, as they show the valuer's thinking about how and why the market evidence links to the proposed values.
  - (c) The comments should be sufficient to explain the variances in the market since the last revaluation for each broad property category and sub-category.
- 

- Information to provide**
- The following information should be provided as part of the market comments and conclusions.
- (a) the general change in market dynamics for broad categories since the last revaluation
  - (b) specific micro market or sub category changes since the last revaluation. Examples are changes in pedestrian counts, vacancy rates, development of new bulk retail areas, and shift in entertainment precinct.
  - (c) the reasons a particular value conclusion was reached, linking the evidence to the proposed values
  - (d) details of assumptions made to arrive at proposed value levels where there is little or no sales evidence or other market evidence
  - (e) why a particular outcome has been adopted where the market evidence is not definitive, for example why you have chosen to index by a certain percentage when the evidence indicates a range, or why you have adopted a particular working basis capitalisation rate or rental when the evidence indicates a range
  - (f) a detailed schedule of final indexes applied if indexing is used. This schedule should include a summary of roll numbers in the TA, outlining the towns or suburbs they relate to and the index levels that are proposed for each property category type
  - (g) if final indexes were determined using a staged process, details of each stage should be provided, for example where an initial index required a subsequent reduction of 5 % based on analysis of the latest evidence
  - (h) the reason for choosing index levels, including details of any best fit analysis, or rationale for full inspections
- 

*Continued on next page*

## Market comments and conclusions, continued

---

**Information to  
provide,**  
continued

- (i) any exceptions where individual or groups of properties moved at a significant variance to the general movements. Include details of specific adjustments
  - (j) treatment of special market features, such as coastal influence
  - (k) supporting maps which illustrate areas of market change
  - (l) the extent of statistical testing and the results of these tests.
-

### 33. Working basis

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**Working basis** You should provide a summary of the valuation attributes from analysis of the key evidence. This summary, or working basis, should be comprehensive enough to allow for accurate valuation of any property and will be important in justifying proposed values.

---

**Contents** This section provides examples of the valuation attributes that should be provided for the following broad category types.

<b>Topic</b>	<b>See page</b>
Commercial and industrial	81
Lifestyle	81
Other	81
Residential	82
Rural	82

---

*Continued on next page*

## Working basis, continued

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### Commercial and industrial

- (a) range of gross or net market rentals for quality, location and age. This range should at least cover appropriate detail for retail, office, car parking, storage, factory, warehouse, hotel and motel tariffs, rest home rates, service station litreage or forecourt rental rates, and lock up sheds
  - (b) adjustment factors for specific property features eg air conditioning, views, green building factors, and stud heights
  - (c) range of outgoings, if gross rents
  - (d) capitalisation rates
  - (e) CV rates for typical properties, ie CV/gross building area
  - (f) value ratios for specific property types, for example capital value per unit for motels, capital value per room for hotels, and capital value per bed for rest homes
  - (g) occupancy levels for hotels and motels by age and location
  - (h) indicative land value rates by unit metre frontage or \$/m<sup>2</sup>
  - (i) excess land rentals if appropriate.
- 

### Lifestyle

- (a) typical site values by roll
  - (b) additional \$/m<sup>2</sup> or \$/ha rates for balance land
  - (c) market based net rates for dwellings
  - (d) added value of improvements.
- 

### Other

- (a) typical rural land values
  - (b) hypothetical subdivision elements, including profit and risk allowances, realisation periods, and interest rates
  - (c) chance of change factors
  - (d) modal rate and key modal variations or multiples, including describing where the modal rate was sourced from, what building plan and specification it relates to and when it was last reviewed.
- 

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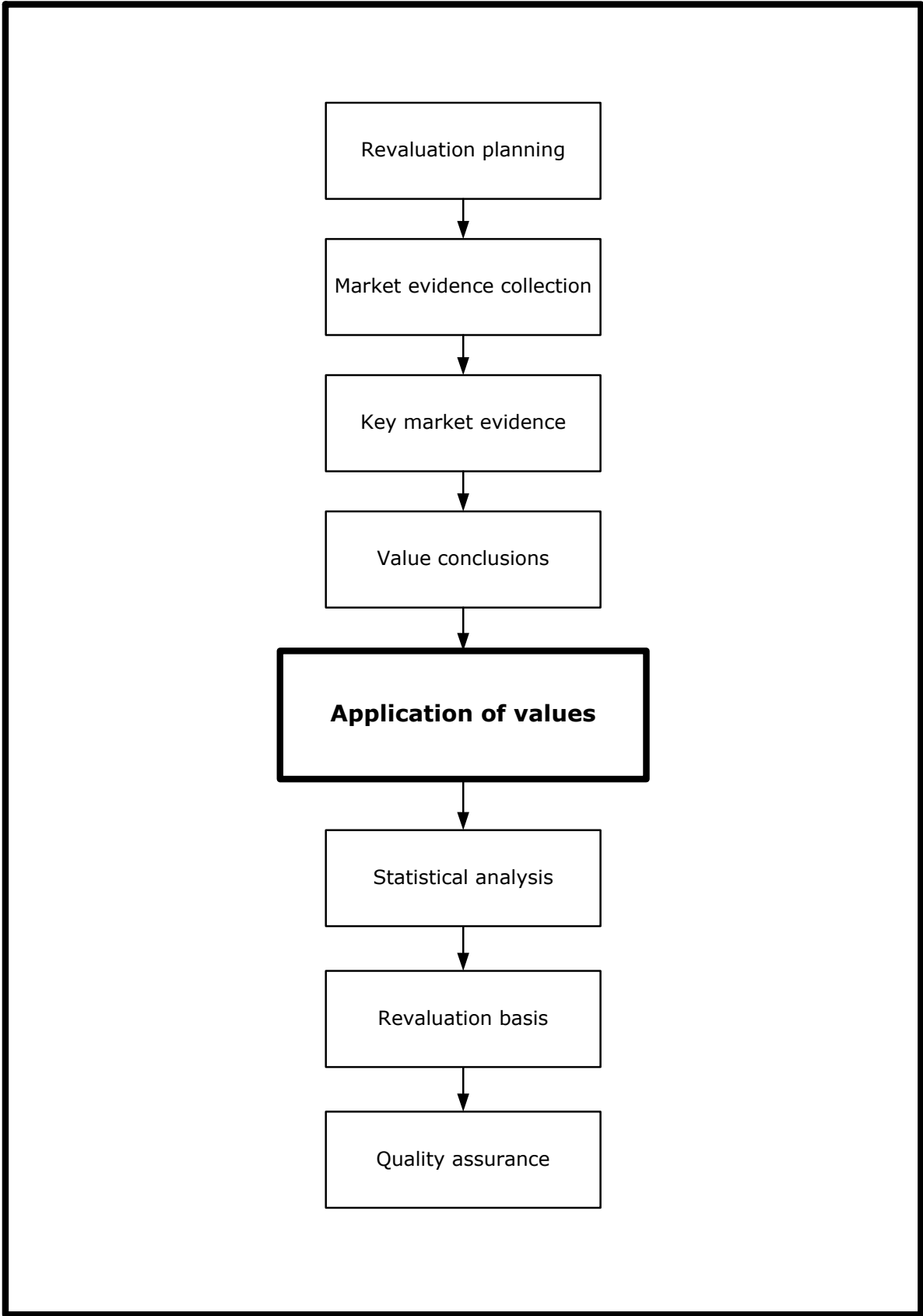


## Working basis, continued

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- Residential**
- (a) market-based net rates for various housing types and localities, where applicable
  - (b) market-based net rates or lump sums for components of houses, eg basements, under main roof garages, and decks
  - (c) typical market-based lump sum allowances for added value of other buildings and other improvements. Other buildings and improvements should include garages, garden sheds, granny flats, sleep outs, tennis courts, swimming pools, driveways, and fencing
  - (d) modal rate and key modal variations or multiples, including describing where the modal rate was sourced from, what building plan and specification it relates to and when it was last reviewed.
- 

- Rural**
- (a) land value rates per hectare for land classes within economic rural properties. These may be for the whole district, certain geographic areas, or each individual roll. You should cover the following land classes:
    - (i) flat,
    - (ii) undulating,
    - (iii) easy hill,
    - (iv) moderate hill
    - (v) steep hill,
    - (vi) gully and sidings.
  - (b) adjustments may be required for different soil classes in some regions
  - (c) typical production levels, for example average kilograms of milk solids per cow per annum for dairy properties, average stock unit per hectare for pastoral properties, trays of avocados, tonnes of grapes
  - (d) value per unit of production for both land value and capital value, for example dollars per stock unit, dollars per kilogram of milk of solids
  - (e) rural guide to improvements. Examples of rural improvements include: dwellings, basements, garages, carports, landscaping, domestic water, implement sheds, hay barns, stables, milking sheds, woolsheds, yards, silos, greenhouses, fencing, water supply other than domestic, roads and tracks. For horticulture, include structures, crop trees, and shelterbelts.
-



# Application of values

## 34. Overview

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- Introduction**
- (a) Once value conclusions have been finalised it is important that these are accurately applied to the revaluation audit file.
  - (b) Where indexing is used, the final index specifications documented in the working basis need to be correctly applied to establish the initial values.
  - (c) Reconciliation between the final index specifications and proposed values on the audit file should be completed to ensure that the correct index application has occurred.
- 

**Contents** This section contains the following topics.

<b>Topic</b>	<b>See page</b>
Application of values	85
Property inspections—general	86

---

## 35. Application of values

---

### Revaluation basis details

The valuer should provide details in the revaluation basis as to how the proposed values were applied for each property category and sub-category. For example, rural index programme, index by percentage, or individual recalculations.

---

### Reconciliation of index levels

- (a) Where indexing is used it is essential that the index conclusions are accurately applied to create new values. You should provide a comprehensive list of the final indexing specifications. This list should reconcile with the indexes that were applied. If more than one method of value adjustment was used, where practical, all adjustment specification should be shown on one schedule, eg if both capital value indexing and investment approach rental indexing was employed.
  - (b) Where you have determined the final indexing specifications using a staged process, details of each stage should be provided, eg if an initial index required a subsequent reduction of 5% based on analysis of the latest evidence. This demonstrates how the original analysis and conclusions have been reconciled with the final indexes applied.
  - (c) Care needs to be taken to ensure that individual lineflow changes to proposed values are reconsidered if new indexes are applied. This is relevant for index changes made during the revaluation process and for changes that result from the audit.
  - (d) The valuation methodology should be able to be applied to any individual property to support the proposed value by index, within accepted valuation tolerances.
- 

### Lineflows

- (a) The valuer should check that proposed value movements on the lineflows match those recorded on the index schedules.
  - (b) Where lineflows are used for inspections, the lineflows should include all the property file fields as well as the date and sale price of the last sale, for each rating unit on the DVR.
- 

### Outlier testing

- (a) An outlier is a property where the proposed value has changed from the current value significantly more than the average.
  - (b) Before submitting the audit file, the valuer should run tests to identify outlier properties and verify the valuation outcomes for these.
-

## 36. Property inspections—general

---

**Refer to** Rule 5.6.2

---

**Introduction**

- (a) Rule 5.6.2 requires valuers to undertake sufficient inspections to demonstrate that proposed values are a fair indication of market values as at the effective date of the revaluation.
- (b) Compliance with rule 5.6.2 is assessed based on the level of inspections:
  - (i) for roll maintenance between revaluations,
  - (ii) when formulating value conclusions before audit, and
  - (iii) after application of the initial proposed values.

---

**Review accuracy of values**

- (a) The VSP should review the accuracy of current values against sales which occurred in the period at least 12 months before the effective date of valuation. This helps identify which areas may need closer inspection. Preferably, this review will be completed for all sales since the date of the last revaluation.
- (b) A higher level of inspection may be required in the following circumstances.
  - (i) a significant percentage of the sales relevant to the revaluation basis are S12
  - (ii) there is a low volume of sales for a particular property category or micro-location
  - (iii) a high level of data inaccuracy is found in the sales data.
- (c) Lineflow checking should be completed following application of indexes, concentrating particularly on areas where statistical test results or other analysis indicates that proposed values may not be justified.
- (d) Where the condition of walls or roof of a property have been observed on inspection as either improved, or deteriorated from the current mass appraisal condition data, their condition codes should be adjusted on the DVR during the lineflow process. This is particularly important to be updated when the physical condition has resulted in a manual value adjustment either above or below the indexed value level.

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*Continued on next page*

## Property inspections—general, continued

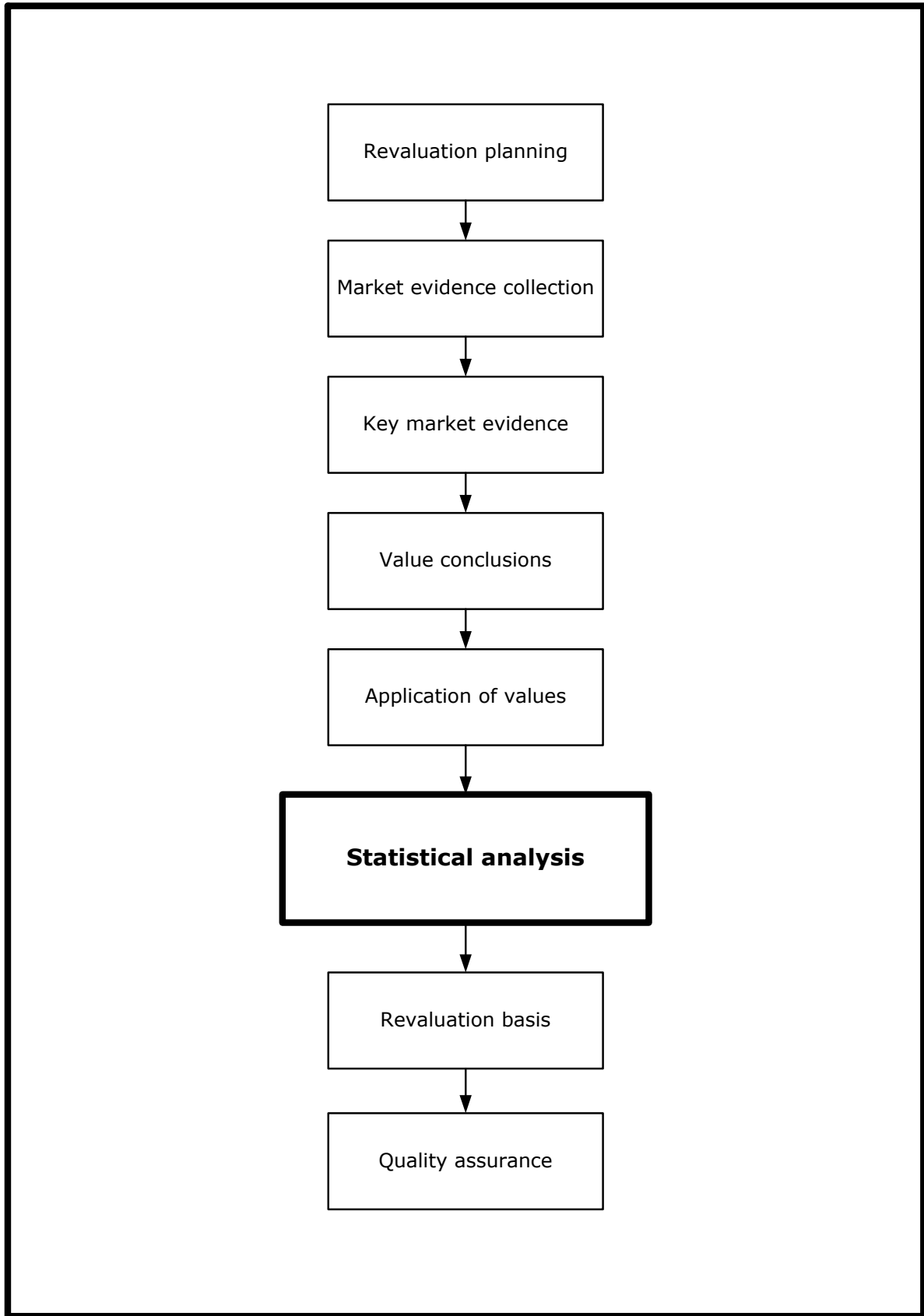
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**Documentation** The following information should be provided.

- (a) the factors used to decide which properties to inspect to demonstrate that sufficient inspections have been carried out. See below for examples of when to inspect.
  - (b) the locations where properties were inspected
  - (c) how the inspections were carried out, eg roadside, on-site but external, or internal
  - (d) the percentage of properties inspected in each broad category type.
- 

**Examples of when to inspect**

- (a) areas where there is a poor statistical fit of recent sales to current values
  - (b) areas where there is a poor statistical fit of recent sales to proposed values
  - (c) areas with large numbers of outlier sales
  - (d) areas which had wide variances in settlement levels of objections from the last revaluation
  - (e) areas where the base values are becoming unreliable as noted during roll maintenance inspections or from the Errors & Omissions file
  - (f) properties with special attributes, such as view or coastal influence, which may result in value changes which vary from the typical properties in the area
  - (g) areas where significant land use changes are happening
  - (h) areas of inconsistency shown by thematic mapping
-



# Statistical analysis

## 37. Overview

---

**Refer to** Rule 5.5 and commentary

---

- Introduction**
- (a) Statistical testing is a reliable technique that allows proposed values to be compared with market sales evidence to determine the accuracy of the revaluation. The tests are based on international best practice standards for mass appraisals.
  - (b) Complying with the Rules relating to statistical testing is critical to a revaluation being certified.
  - (c) There may be circumstances where the statistical results do not comply with the Rules but the proposed values can be justified. In these circumstances, the valuer should provide a detailed explanation justifying the proposed values. If this explanation isn't provided, it will be requested, or the valuer will need to reconsider the proposed values.
  - (d) Only S11 market sales are used for the statistical tests.
- 

**Contents** This chapter contains the following topics:

<b>Topic</b>	<b>See page</b>
Application of statistical tests	90
Coefficient of dispersion	91
Median value price ratio	94
Price related differential	95
Comparison of average value changes	97
Calculation tables	99

---



## 38. Application of statistical tests

---

### Application of statistical tests

- (a) You should provide evidence in the revaluation basis that rule 5.5 has been complied with.
- (b) The appropriate date range for the sales and leases to be tested may vary based on market conditions.

**Example 1:** In a rapidly changing market, only the most recent sales may be relevant.

**Example 2:** In a static market, sales as far back as 12 months or further may be relevant.

- (c) In a rapidly changing market, sales close to the effective date of valuation should always be used in preference to older sales. This may mean that only 10 to 20 sales very close to the effective date will provide significant statistical results.
  - (d) The sample groupings of properties to use for statistical testing need to be relevant to the prevailing market conditions.
  - (e) During the 15-day audit period, the VG will request a new property and sales file. The statistical tests prescribed in rule 5.5 will be re-run on these files.
-

## 39. Coefficient of dispersion

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**Refer to** Rule 5.5

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- Definition**
- (a) The coefficient of dispersion (COD) measures the sample of S11 sale properties relevant to the test criteria for uniformity between proposed values and net sale prices.
  - (b) The COD reflects the number of standard deviations between proposed values and net sale prices.
  - (c) The Rules set the minimum standard for the COD at 12 or less.
- 

- Calculating COD**
- To calculate the COD, carry out the following steps:
1. For S11 sales only, divide the revised capital value by the net sale price to obtain a ratio per sale.
  2. Identify the median ratio from the sales.
  3. Subtract this median ratio from each of the individual sales ratios to determine the absolute difference for each sale.
  4. The absolute difference ratio requires conversion of all differences between the median ratio and individual sales ratios to a positive.
  5. Add all absolute difference ratios.
  6. Divide the sum of absolute difference ratios by the number of sale samples.
  7. Divide the result in step 6 by the median ratio from step 2.
  8. Multiply the result by 100 to get the COD.
- 

*Continued on next page*

## Coefficient of dispersion, continued

---

### **Worked example: calculating the COD**

The following worked example uses the data in Table 1 on page 100 and applies the method described on the previous page.

1. The ratios of revised capital value to net sale price are set out in column 10.
2. The median ratio is 0.909090909.
3. The absolute differences are set out in column 11.
4. If the median ratio is 0.909 and sale 1 is 0.784 then the absolute difference ratio is  $0.784 - 0.909 = -0.125$  so this is converted to a positive, ie 0.125. If the sale ratio is greater than the median ratio as in sale 9, the absolute difference result is already a positive:  $1.149 - 0.909 = 0.240$ .
5. The sum of the absolute difference ratios is 1.1241072.
6.  $\frac{1.1241072}{9} = 0.1249008$
7.  $\frac{0.1249008}{0.909090909} = 0.13739088$
8. Therefore the COD = 13.74 (rounded to two decimal points).

---

### **COD results less than 5**

If the COD is less than 5, this could indicate a high degree of relativity or that proposed values have been manipulated to closely match the net sale prices.

---

### **COD results greater than 12**

If the COD is greater than 12, the valuer should check the accuracy of indexes, proposed values, and sales classified as S11.

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*Continued on next page*

## Coefficient of dispersion, continued

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### **Common issues with the COD**

- (a) If some S11 sales have proposed capital values which vary widely from the net sale price then these distort the COD.
  - (b) Using Table 1 as an example, if Sale 1 had a new improvement it should have initially been classified as S12. In this case, both the current and proposed capital values should be altered to reflect the physical condition of the property at the date of sale. The proposed CV of Sale 1 may need to be adjusted to \$245,000 and the resulting COD would then be 11.6.
  - (c) Where one sale has a large difference between the proposed CV and the net sale price, this may cause the COD test to fail, especially if there are low sale volumes.
  - (d) The valuer may find that a sale recorded as S11 was in fact non-market and should have been classified S13, thereby taking it out of the statistical tests.
- 

### **Failed COD test: uniformity between proposed capital values and net sale prices**

If the valuer is satisfied that all sales are correctly classified and the COD is still greater than 12, then there could be a lack of acceptable uniformity between the proposed CVs and sale prices of the sample sale properties. In this case the proposed values will need to be reviewed.

In Table 1, where the COD is calculated as 13.7, properties are likely to need a greater level of inspection and more manual value calculations.

---

## Median value price ratio

---

**Refer to** Rule 5.5

---

**Definition**

- (a) The median value price ratio is the middle value price ratio of a sale sample range. For an even numbered sample it is the mean of the two middle ratios.
- (b) The Rules set the minimum standard set for the median value price ratio between 0.9 and 1.1.

---

**Date ranges**

- (a) The median value price ratio is sensitive to changes in the market and relies on the most recent sales for an accurate measure.
- (b) The relevant date range for the sales sample may be as short as two weeks prior to the effective date of valuation in a rapidly changing market where there is an adequate volume of sales.
- (c) In steady or slower markets, a date range of three months or more may be reasonable.

---

**Examples**

- (a) Refer to Table 1 on page 100 for an example of a median value price ratio of 0.909.
- (b) Refer to Table 2 on page 101 for an example of a median value price ratio of 0.986.

---

**Audit notes**

- (a) Although the median value price ratio minimum standard is 0.9 to 1.1, audit practice is to query results outside the range 0.95 to 1.05 where there are enough relevant sales on which to base the test.
- (b) This approach is particularly relevant where the most recent sales are showing a new trend compared to the older sales which may have been used to determine the initial proposed values.

---

## 40. Price related differential

---

**Refer to**

Rule 5.5

---

**Definitions**

- (a) The price related differential measures the relative accuracy of lower and higher value sales against proposed capital value.
  - (b) The Rules set the minimum standard for the price related differential ratio between 0.98 and 1.03.
- 

**Calculation of price related differential**

- To calculate the price related differential, carry out the following steps:
- 1. Calculate the mean value/price ratio by dividing the sum of all value/price ratios by the number of sales.
  - 2. Calculate the weighted mean by dividing the sum of all revised capital values by the sum of net sale prices.
  - 3. Divide the mean by the weighted mean. The result is the price related differential.
- 

**Worked example: calculating the price related differential**

The following worked example uses the data in Table 1 on page 100 and applies the method described above.

- 1. The mean = 0.971293
  - 2. The weighted mean = 0.9723757
  - 3. The price related differential is:  $\frac{0.971293}{0.9723757} = 0.9988865$ .
- 

**Ratios outside the prescribed range**

- (a) If the price related differential ratio is above 1.03 then higher value properties are potentially undervalued relative to lower value properties.
  - (b) If the price related differential ratio is under 0.98 then lower value properties are potentially undervalued relative to higher value properties.
- 

*Continued on next page*

## Price related differential, continued

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### **Failure of the price related differential test**

- (a) If the result of the price related differential test is outside the prescribed range, it may be because the analysis of sales evidence or the resulting conclusions do not accurately reflect variable movements between value brackets.
  - (b) For example, failure may occur where one broad index is not appropriate for all properties in the roll or sales group. The lower value properties may have increased by a higher percentage than higher value properties, or vice versa.
- 

### **Sales date range**

The price related differential test is the least affected by the date range, provided the proposed values have reflected the relative value changes for lower compared to higher value properties.

---

## 41. Comparison of average value changes between sold and unsold properties

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### Refer to

Rule 5.5

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### Definition

- (a) This test measures the difference between the average value change of sold properties and unsold properties.
  - (b) The Rules set the minimum standard for the average value change between sold and unsold properties at equal to or less than 5 %.
- 

### Calculating comparison of average value changes

1. For each sale property divide the revised capital value by the current value and average the results. This provides the average value changes for sold properties.
  2. For unsold properties divide the revised capital value by the current value then average the results. This provides the average value changes for unsold properties.
  3. Compare the average movement for sold properties against the average movement for unsold properties. The average value changes should be less than or equal to 5 %.
- 

### Test results

- (a) This is the only statistical test that includes unsold properties and is useful for all property categories except **other**.
  - (b) This test is only relevant where preceding statistical tests, which are based on sale properties alone, meet the minimum standards.
  - (c) In certain circumstances, there may be a logical reason for average value changes to be greater than 5 %.
  - (d) In these cases, detailed information about each sale is required to support the variance. There may only be a small number of sale samples and this would increase the need for detailed explanations.
  - (e) If adjustments are made to the proposed values of sale properties after the initial values are determined this could cause this test to fail.
- 

*Continued on next page*



## Comparison of average value changes between sold and unsold properties, continued

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### **Failure of the sold to unsold test**

- (a) When comparing the average value changes, if the latest sale properties have increased in value by 90 % but unsold properties have increased by 80 %, then the test appears to fail.
  - (b) There may be a valid reason for this. The sale properties may not be representative of the wider market, for example a large number of sale properties have sea views but the majority of unsold properties do not.
  - (c) The usefulness of this test reduces as the magnitude of value movement increases between the current and revised values eg a sold to unsold variance of 6 % where the sold property values have increased by 250 % and the unsold properties have increased by 244 % would not necessarily be a cause for concern.
-

## 42. Calculation tables

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**Refer to** Rule 5.5

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**Calculation tables**

- (a) The tables on the following pages illustrate the practical application of the following statistical rules.
  - (i) coefficient of dispersion
  - (ii) median value price ratio
  - (iii) price related differential.
- (b) Table 1 depicts a moderate wide variation between revised capital value and net sale price.
- (c) Table 2 depicts a small variation between revised capital value and net sale price.
- (d) Both Tables 1 and 2 use a sales sample of 9 for demonstration purposes. However a larger sample, ideally over 20 sales, is necessary to have a higher level of confidence in the statistical results.

---

**Table 1: Moderate variation between proposed capital value and net sale price**

Column number →	1	2	3	4	5	6	7	8	9	10	11
	Sale number	Roll	Assessment number	Sale date	Sale type	Sale tenure	Price/ value	Net sale price	Revised capital value	Ratio of revised capital value to net sale price	Absolute difference
	1	2110	501	02/08/2009	S	1	1	255000	200000	0.784313725	0.1247772
	2	2110	7502	15/08/2009	S	1	1	270000	220000	0.814814815	0.0942761
	3	2110	1520	20/08/2009	S	1	1	370000	325000	0.878378378	0.0307125
	4	2110	610	15/08/2009	S	1	1	365000	320000	0.876712329	0.0323786
	5	2110	5151	26/08/2009	S	1	1	275000	250000	0.909090909	0
	6	2110	2103	25/08/2009	S	1	1	210000	230000	1.095238095	0.1861472
	7	2110	2118	12/08/2009	S	1	1	285000	315000	1.105263158	0.1961722
	8	2110	7305	18/08/2009	S	1	1	350000	395000	1.128571429	0.2194805
	9	2110	8806	26/08/2009	S	1	1	335000	385000	1.149253731	0.2401628

**Median ratio 0.909090909**

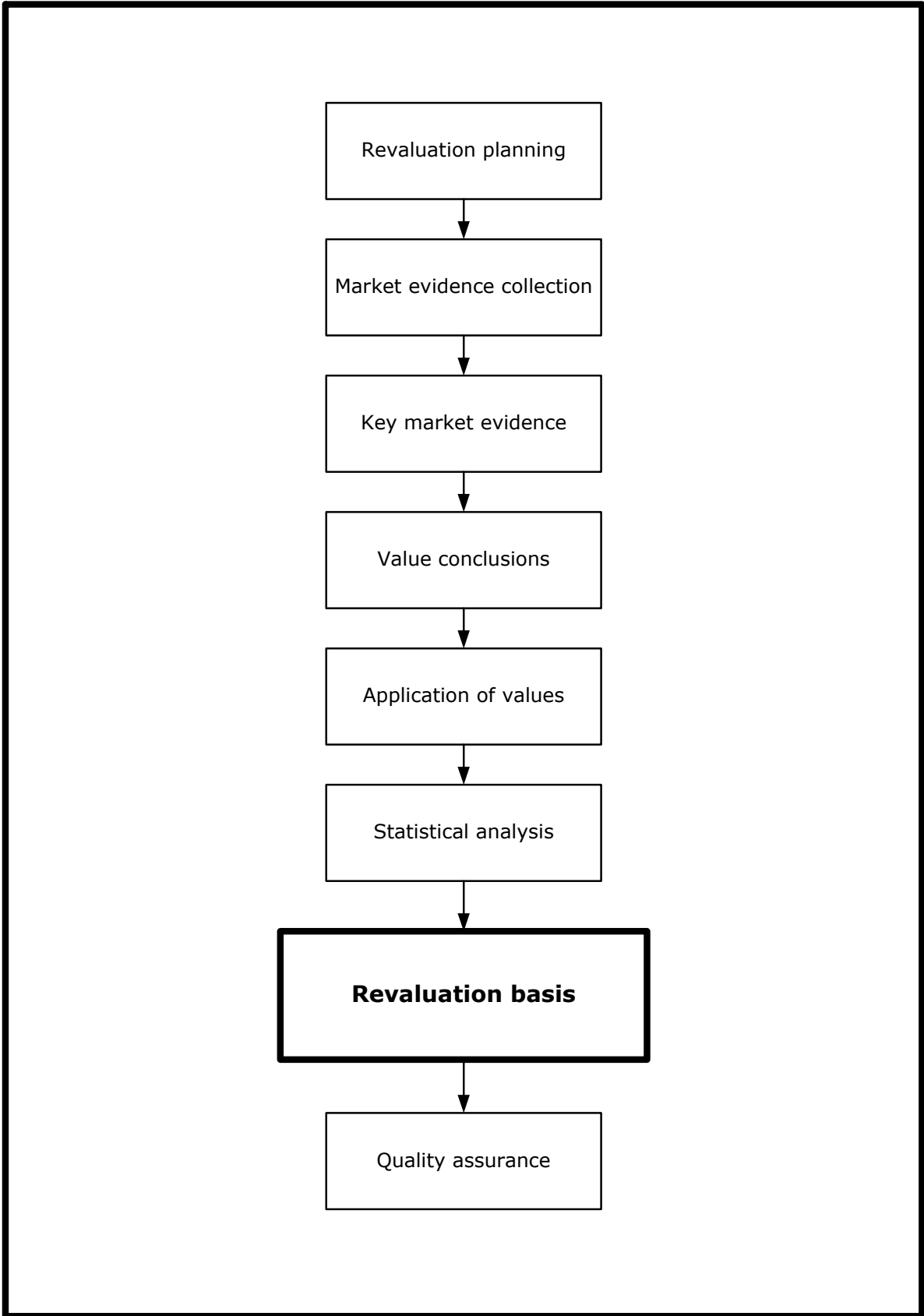
**Sum of absolute differences 1.1241072**

**Table 2: Small variation between proposed capital value and net sale price**

Column number →	1	2	3	4	5	6	7	8	9	10	11
	Sale number	Roll	Assessment number	Sale date	Sale type	Sale tenure	Price/ value	Net sale price	Revised capital value	Ratio of revised capital value to net sale price	Absolute difference
	1	2110	501	02/08/2009	S	1	1	255000	240000	0.941176471	0.04531
	2	2110	7502	15/08/2009	S	1	1	270000	250000	0.925925926	0.0605606
	3	2110	1520	20/08/2009	S	1	1	370000	365000	0.986486486	0
	4	2110	610	15/08/2009	S	1	1	365000	350000	0.95890411	0.0275824
	5	2110	5151	26/08/2009	S	1	1	275000	250000	0.909090909	0.0773956
	6	2110	2103	25/08/2009	S	1	1	210000	225000	1.071428571	0.0849421
	7	2110	2118	12/08/2009	S	1	1	285000	300000	1.052631579	0.0661451
	8	2110	7305	18/08/2009	S	1	1	350000	385000	1.1	0.1135135
	9	2110	8806	26/08/2009	S	1	1	335000	345000	1.029850746	0.0433643

**Median ratio** 0.986486486

**Sum of absolute differences** 0.5188135



# Revaluation basis

## 43. Overview

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**Refer to** Rule 5.4

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**Definition** The revaluation basis is the documentation of the evidence and analysis justifying the value levels adopted for property categories, as defined in the Rules.

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**Introduction** The revaluation basis:

- (a) describes the district and the property types within it,
- (b) documents the revaluation process and highlights important valuation issues,
- (c) provides details of evidence analysis and proposed value conclusions,
- (d) links the evidence to the proposed values, and
- (e) explains the results of statistical tests and other quality assurance processes used.

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**Contents** This chapter contains the following topics:

<b>Topic</b>	<b>See page</b>
Profiling	104
Methodology	105
Applying more than one valuation methodology	105
Methodology for designated land	106
Rural average efficient criteria	107
Graphs showing market movements	108

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## 44. Profiling

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**Profiling** Provide a profile of the district, identifying the different property types within the district.

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**Examples of items to consider**

- (a) schedule of rolls and sales groups
- (b) typical make-up of property categories within rolls or sales groups
- (c) identify significant market features within rolls or sales groups
- (d) typical range of both current and proposed capital values and land values
- (e) any supporting graphical information including monthly price movements and sales volumes since the last revaluation
- (f) cadastral maps showing any market features that affect properties, eg subsidence area and properties prone to coastal erosion
- (g) digital maps showing value relativity levels
- (h) map showing roll boundaries and roll numbers
- (i) details of significant properties, such as dams, forestry, and tourist attractions
- (j) working basis information for key valuation attributes, eg rents, capitalisation rates, dollar land value per square metre, and dollar per unit of production.

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## 45. Methodology

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- Methodology**
- (a) The valuation methodology used for each broad property category, should be provided.
  - (b) Where appropriate, the methodology should be provided for sub-categories, such as elderly rest homes, cinemas, motels, and kiwifruit orchards.
  - (c) If a valuation methodology developed by a VSP's nominated expert is applied by local valuers, then guidance and training should be provided to ensure the local valuer can explain any particular adjustments for the district.
- 

**Applying more than one valuation methodology**

It may be appropriate to apply more than one valuation methodology and then reconcile the results, for example a hypothetical subdivision and a block land value method for large sites with redevelopment potential, or a per unit comparison method and the rental capitalisation method for motel properties.

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- Designated land**
- (a) A designation is a provision in a district plan under Part 8 of the RMA to give effect to a requirement made by a requiring authority.
  - (b) A requiring authority can be a Minister of the Crown, a local authority, or an approved network utility operator, as defined in the RMA.
  - (c) In some cases designated land may have a greater value than the underlying zoned land. An example of this could be a successful school or university on a large residential site in a city environment.
  - (d) The use of designations as a planning tool is uncommon under the RMA, with many public spaces, such as green belts and reserves, now having their own open space zoning.
  - (e) In cases where there is no designation, the rating valuation is assessed purely on the basis of the zoning.
- 

*Continued on next page*



## Methodology, continued

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### Methodology for designated land

The accepted methodology for determining the value of designated land, based on case law, is as follows.

1. Assess the value of the land based on its underlying zoning, as if no designation was in place. This may require a hypothetical subdivision.
  2. Assess the value of the land with the designation in place. Often a rural equivalent value with a location factor adjustment is used in the case of parks or schools. This adjustment factor should reflect what a rural equivalent parcel would sell for in the particular metropolitan area. A significant adjustment factor may be appropriate depending on the relative value difference between urban and rural areas in the district.
  3. Subtract the value in step 2 from the value in step 1.
  4. Determine a chance of change factor. This reflects the likelihood and ease of removing the designation and allowing the land to be fully developed in accordance with the underlying zone.
  5. Multiply the chance of change factor with the result in step 3.
  6. Add the result in step 5 to the value in step 2 to provide the designated land value.
- 

### Worked example

The following worked example uses the method above.

1. value of land based on underlying zoning = \$1,000,000
  2. value of the land with the designation in place = \$600,000
  3.  $\$1,000,000 - \$600,000 = \$400,000$
  4. chance of change factor = 60 % (0.6)
  5.  $0.6 \times \$400,000 = \$240,000$
  6.  $\$600,000 + \$240,000 = \$840,000 = \text{designated land value}$
-

## 46. Rural average efficient criteria

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**Basis for rural  
average  
efficient  
criteria**

The revaluation basis should include the criteria for determining the average efficient management regime for the district as well as:

- (a) a summary of key changes in the market,
  - (b) significant trends in land use changes, and
  - (c) a comparison of production changes since the last revaluation.
-

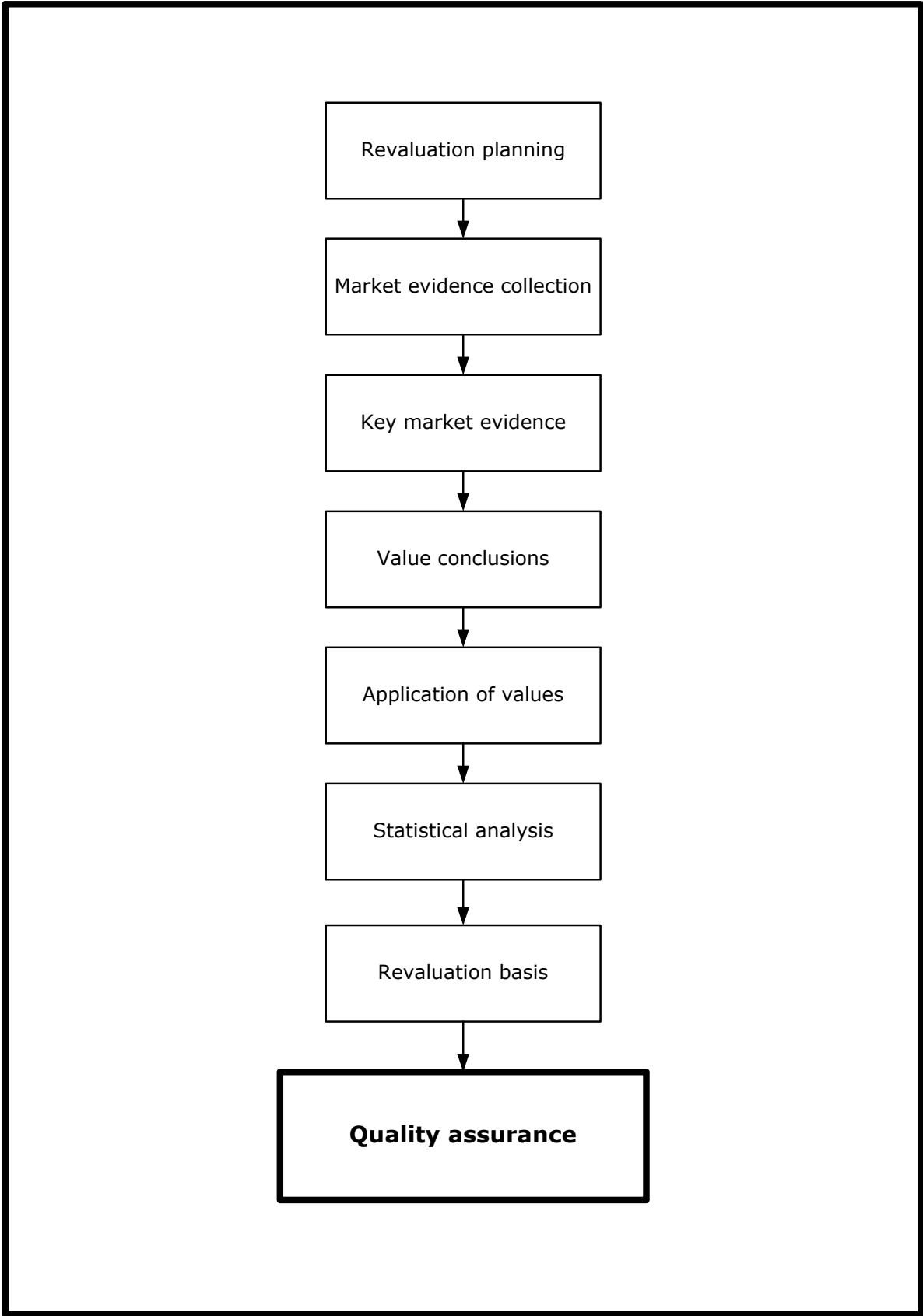
## 47. Graphs showing market movements

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### **Graphs showing market movements**

Provide graphs showing the monthly or quarterly change in median sale price since the date of the previous revaluation for the categories of RD, RV, LI and LV. Sales volumes are also useful and can be incorporated into the median sale price graphs.

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# Quality assurance

## 48. Overview

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- Introduction**
- (a) Quality assurance of a revaluation includes any actions that the TA and VSP carry out to test and review the processes used throughout the revaluation and review the proposed values to ensure the accuracy of the audit files and the written basis.
  - (b) It is necessary to have a complete understanding of the revaluation process and identify both the risks involved and the most appropriate control points to mitigate these risks. An example is peer review of the accuracy of proposed indexes before producing the initial values.
  - (c) It is essential that quality checks are run before submitting the original file for audit and again before the final file is certified.
  - (d) It is not acceptable to rely on an audit by the VG as the primary quality assurance mechanism and if this occurs, the audit report will criticise the management of the revaluation in this area.
- 

**Contents**

This chapter contains the following topics:

<b>Topic</b>	<b>See page</b>
Before audit	111
Audit follow-up	112

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## 49. Before audit

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- Peer review** Peer review should be carried out on high risk areas or areas that have caused issues in past revaluations. This may include:
- (a) individual properties that have a significant rating consequence, such as airports, hydroelectric stations, and major shopping malls;
  - (b) groupings of properties that have a significant rating consequence, for example CBD and forestry;
  - (c) index conclusions, especially before producing the initial proposed values. Emphasis should be given to the level of justification for the indexes based on market evidence and to identification of any potential cusp issues;
  - (d) reviewing that there are no extreme or illogical valuation results, for example, checking land values as a percentage of capital values by category and/or roll. This should include strata titles, where typically land value proportions would be within the range of 25-50% of capital value, and
  - (e) statistical test results. These results should be reviewed and any failures adequately explained.
- 

- Sales audit file** Before submitting sales evidence for audit, the TA and VSP should check that:
- (a) all available sales notices have been entered in the DVR,
  - (b) the sales audit file is complete,
  - (c) the category of each rating unit is consistent on the property and sales files and any exceptions are explained, and
  - (d) sales data other than that confirmed on the sales file has recorded. An example of such data is that in the REINZ database.
-

## 50. Audit follow-up

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- Introduction**
- (a) As a result of the pre-audit checks and the on-site audit, there is likely to be follow-up work required to justify proposed values.
  - (b) Information from the pre-audit checks and the follow-up work should be returned to the VG at least three days before the sign-off date. This is currently the Wednesday before the sign-off date.
- 

- Pre-audit tests** Following receipt of the pre-audit checks from the VG, the valuer should:
- (a) provide electronic comments to justify the proposed values and other data, or
  - (b) make appropriate changes with consent of the auditor and record these on the property file changes schedule. Refer to page 114 for more on the property file changes schedule.
- 

- Final file quality assurance**
- (a) The final property file should be reviewed for outliers, that is, rating units where any values have changed significantly from the original property file, without justification.
  - (b) The final sales file should be reviewed for any new:
    - (i) S11 sales relevant to the effective date of valuation. Check the accuracy of proposed values against these and consider any changes to individual properties or groups of properties as a result;
    - (ii) S12 sales;
    - (iii) S13 sales. Check the valuer's remarks field is completed and provides justification for the non-market classification; and
    - (iv) multi-sales where the proposed values vary significantly from the consolidated market sale price.
  - (c) The valuer should reconcile the number of rating units and the total land area between the first and final audit files.
- 

- Audit file validation** The final files should be tested using LINZ validation software to ensure that no errors exist. This software can be obtained by contacting the VG.
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## Audit follow-up, continued

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**Final audit file changes**

- (a) During the audit period, a new property and sales file will be requested by the VG.
- (b) Where there are changes to any values, additions and deletions of rating units, or changes to property categories on the property file during the audit period, these should be provided in the property file changes schedule. Refer to page 114 for more on the property file changes schedule.
- (c) Any change described above and made within the audit period must be agreed to by the auditors.
- (d) It is recommended that you review the first and final files to ensure that all changes are intentional.

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## Audit follow-up, continued

### Property file changes schedule

- (a) Each change made during an audit period, and the reason for that change, should be recorded on a schedule which is submitted for final approval, preferably in the format below.
- (b) The VG will check changes against what was agreed to with the VSP.
- (c) A schedule of changes to the property audit file should contain the following fields, where the number **1** relates to information in the first audit file, and **2** refers to information in the final audit file:

Field	Description
val roll	valuation roll number
val assessment	valuation assessment number
category 1	property category
category 2	property category
land area 1	in hectares
land area 2	in hectares
CV 1	capital value 1
LV 1	land value 1
VI 1	improvements value 1
CV 2	capital value 2
LV 2	land value 2
VI 2	improvements value 2
RCV 1	revised capital value 1
RLV 1	revised land value 1
RVI 1	revised improvements value 1
RCV 2	revised capital value 2
RLV 2	revised land value 2
RVI 2	revised improvements value 2
components changed, eg CV2, RCV2	
reason for the change	Comments should be concise and clearly relate to an audit issue. Refer to the next page for examples.

*Continued on next page*

## Audit follow-up, continued

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### **Examples of reasons for change**

The following are some examples of reasons for changes on the property file.

- (a) aligned with market evidence
  - (b) calculation error
  - (c) category change
  - (d) cusp error
  - (e) improvements added
  - (f) improvements removed
  - (g) integrity check
  - (h) match to S11 sale
  - (i) new index
  - (j) new rating units
  - (k) punching error
  - (l) reapply correct basis index
  - (m) removal of rating units.
-