Montana Department of
REVENUE

Market Value Determination

Revenue and Transportation Interim Committee

December 1, 2015

Overview

- Why Reappraisal?
- Discuss the Approaches to Value
- Specific Discussion on Approaches to Value

Why Reappraisal?

Constitution

- Requires all property to be valued by the state
- Equalization - the state is required to value similar property in the same manner

The Law

- The law requires the state to value all property periodically
- All taxable property is required to be valued at 100% market value except as determined otherwise.

Valuation Methods or Approaches

Market value of property can be determined using three methods:

- Cost
- Income
- Market

Cost Approach

The ***Cost approach*** seeks to determine how much a property would cost to replace (meaning, rebuild) less accrued depreciation.

Accrued depreciation is the reduction in actual value of property over a period of time as a result of wear and tear or obsolescence.

Reproduction cost is used if an exact replica of the original property is produced.

Replacement cost is used if a property is rebuilt with comparable utility, but using current design and construction methods and materials.

Income Approach

The ***Income approach*** seeks to value property using the income generated by the property. When a property generates income for it's owner, that income, or potential for income, helps to substantiate, calculate or identify the market value of the property.

Apartment buildings and duplexes are examples of income-producing properties.

Market or Sales Comparison Approach

The ***Market or Sales Comparison*** approach bases the opinion of value on what similar properties (otherwise known as “comparables”, or “comps”) in the vicinity have sold for recently.

These properties are adjusted for time, acreage, size, amenities, etc. as compared to the property that is being appraised.

Understanding which (and to what extent) adjustments are reasonable for a given market area (for a given property) relies on the experience of the appraiser.

A property characteristic that is highly valued in one neighborhood may not be valued to the same degree in a different area.

Valuation Methods Used by the Department by Property Type

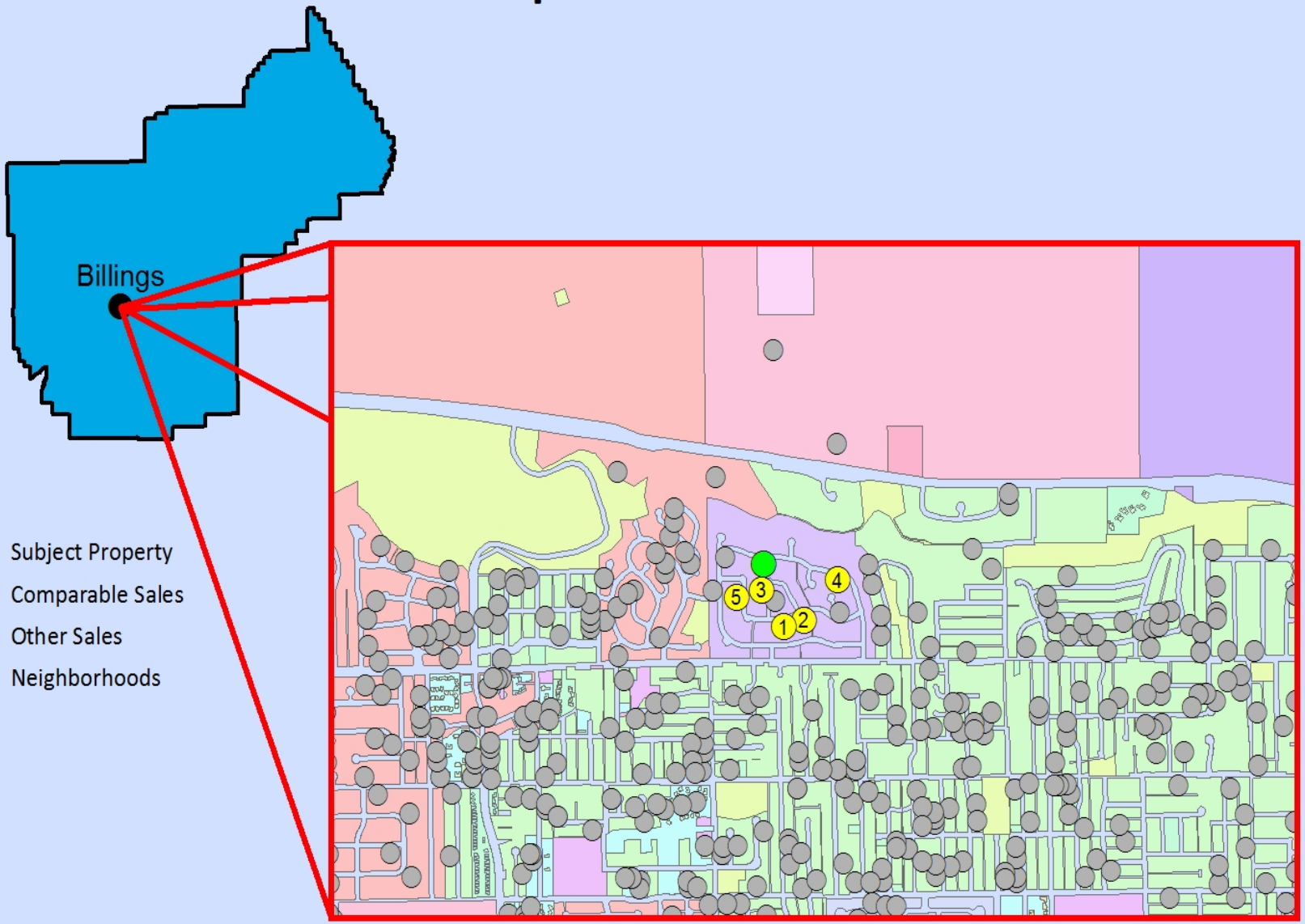
Residential → Sales Approach
Residential → Cost Approach

Commercial
Industrial
Centrally Assessed → Sales Approach
Commercial
Industrial
Centrally Assessed → Cost Approach
Commercial
Industrial
Centrally Assessed → Income Approach

Agricultural → Income Approach

Forest → Income Approach

Sales Comparison Method



Comparing Subject Property to Comparable Property

Cost Approach to Value

Primarily Residential and Commercial Property

Land Value

+

Improvement Cost

–

Depreciation

=

Market Value

Income Approach Commercial Property

$$\frac{\text{Income} - \text{Expenses}}{\text{Rate of Return}} = \text{Market Value}$$

Agricultural Land Valuation – Income Approach

Productivity Value = (land productivity X commodity price X crop share) / rate of return

Productivity Determined:

- **Natural Resource Conservation Service (NRCS) Soil Survey**

and

- **Adjustments when appropriate to approximate average production**

Commodity Price

- **10 Year Olympic Average**
  - **Grazing Land**
    - **Private Grazing Fee**
  - **Non-irrigated farm land (Summer fallow and continuous crop farmland)**
    - **Spring wheat**
  - **Irrigated and non-irrigated hay land**
    - **Spring Wheat or Alfalfa Hay**

Commodity Prices

(*Current vs. 2015 Prices)*

2015 (10 Year Olympic Average)	Indicates price not included in Average		
Commodity	**Spring Wheat**	**Alfalfa**	**Private Grazing Fee**
Year	**Price**	**Price**	**Price**
2013	$6.70	$141.00	$21.00
2012	$8.39	$146.00	$20.50
2011	$8.36	$98.00	$19.40
2010	$6.87	$79.00	$18.40
2009	$5.72	$96.00	$18.00
2008	$7.36	$117.00	$18.10
2007	$7.49	$79.00	$17.80
2006	$4.58	$78.00	$16.20
2005	$3.80	$71.00	$16.20
2004	$3.69	$77.00	$15.90
Olympic Avg	**$6.36**	**$95.63**	**$18.08**
Adjustments	***No adjustment***	***15-7-202 stipulates a 20% reduction in the alfalfa price***	**No adjustment**
2015 Price	**$6.36**	**$76.50**	**$18.08**
2009 Price	**$4.58**	**$63.04**	**$15.72**
% change from current cycle	**39%**	**21%**	**15%**

Agricultural Values - Example

Productivity Value = (land productivity X commodity price X crop share) / rate of return

Summer Fallow Farmland (Wheat)

Land Productivity	**= 22 bu./ac**
Average price for spring wheat	**= $6.36 /bu.**
Crop Share	**= 12.5%**
Rate of Return (Capitalization Rate)	**= 6.4%**

$273.28/acre = 22 (bu./ac) X $6.36 (/bu.) X 12.5% / 6.4%

Forest Land Valuation – Income Approach

Productivity Value = $\frac{((\text{forest productivity} \times \text{stumpage value}) + \text{net agri. income})}{\text{rate of return}}$

Estimated Change in Forest Property Value

Zone	Average Productivity	2009 value/Acre	2015 value/acre	% change
1	260.75	$938.00	$436.53	-53%
2	170.86	$421.00	$251.71	-50%
3	154.22	$307.00	$171.56	-44%
4	129.18	$195.00	$32.52	-83%

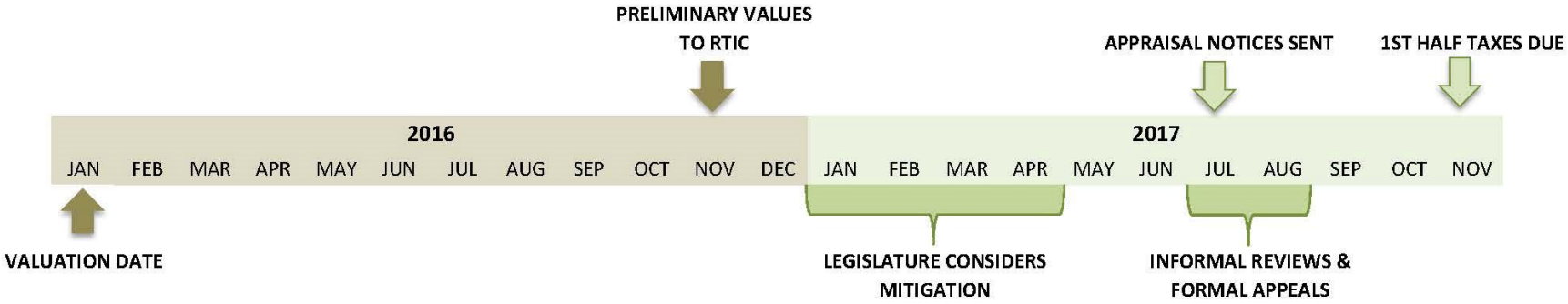
Taxable Value Neutrality

Example of Taxable Value Neutral Rates

Property Type	2014 Market Value (in TY 15) (a)	2015 Taxable Value (b)	Ex. Market Value Growth (c) Example only	2016 Markert Value (d) (a)x(1+c)	TY 2016 Tax Rate (e) (b)÷(d)*	Multiplier (f)**	2016 Taxable Value (g)=(b) (d)x(e)x(f)
Agricultural	$6,263.221	$141.391	***3.20%***	$6,463.644	2.19%	1.00	$141.391
Residential	$88,145.323	$1,176.971	***2.50%***	$90,348.956	1.30%	1.00	$1,176.971
Commercial	$19,428.062	$362.966	***5.10%***	$20,418.894	1.30%	1.36	$362.966

*For commercial properlty, the tax rate is equal to the residential rateand then a multiplier is calculated. The multiplier is equal to (b÷d)÷(e).

2017 Reappraisal Timeline



Questions?