

# 2016 County Board of Appeal and Equalization



**ROSEAU COUNTY**

# Minnesota Real Estate Tax System



- Tax based on Value
- “Value” being Market Value
- Estimated Market Value as of January 2<sup>nd</sup>
- New studies done each year to see if/how the residential, agricultural, and commercial markets have changed.
- Sales Ratio Study Criteria is set by the State.
- The Minnesota Department of Revenue “audits” our assessment to ensure equity across the state.

# Mass Appraisal



**The systematic appraisal of groups of properties as of a given date using standardized procedures and statistical testing.**

**This differs from single-property appraisal, commonly referred to as "fee" or "bank" appraisal, which normally deals with only a particular property as of a given date.**

# What does the Department of Revenue look for?



- In each of the markets:
  - Res, Ag, Commercial
- Look at how our Estimated Market Value compares to the sale price of the properties that have sold in Roseau County
- Sales Ratio is:  
$$\frac{\text{Estimated Market Value}}{\text{Sale Price}}$$
- Study Period:
  - October 1 – September 30
- Various Studies Completed:
  - Countywide Study
  - Any City/Township with 6 or more sales
  - 5 year study for Cities/Townships with less than 6 sales
- Median Ratio must be between 90% - 105%



**Median Ratio  
must be  
between  
90% - 105%**

What  
does  
that  
Mean  
???

SALE DATE	2015 EMV	SALE PRICE	2015 Ratio
10/23/2014	\$103,600	\$155,000	67%
11/3/2014	\$180,100	\$245,000	74%
12/24/2014	\$87,300	\$97,500	90%
1/30/2015	\$122,200	\$154,000	79%
5/12/2015	\$147,700	\$149,000	99%
6/26/2015	\$151,700	\$167,000	91%
9/29/2015	\$96,500	\$135,000	71%

Sort Ratios  
From  
**Smallest**  
to  
**Largest**

Ratio
67%
71%
74%
79%
90%
91%
99%

**Middle  
Ratio is  
The  
Median  
79%**

# What if we are not between 90% - 105%?



**THE STATE BOARD OF EQUALIZATION  
WILL GIVE US A STATE BOARD ORDER.**

**GIVEN IN 5% INCREMENTS.**

**WHEN THESE ARE ORDERED,  
PROPERTY OWNERS ARE NOT NOTIFIED  
UNTIL THEY RECEIVE THEIR  
ESTIMATED TAX STATEMENT  
IN THE FALL.**

# CAMA = Computer Assisted Mass Appraisal



CAMA is a tool/“model” to replicate the market through various schedules for the accomplishment of mass appraisal.

## History of Roseau County’s Conversion to CAMA

- ✓ Land completed for 2011 Assessment.
- ✓ Residential/Agricultural Buildings started in 2013 and completed this 2016 Assessment.
- ✓ Commercial buildings will be converted for 2018 Assessment.



# How does CAMA Work?

Land Value

House Value

Outbuilding Value

- House Value
  - Cost to Reconstruct the Home
    - ✦ Style of Home
    - ✦ Grade of Home – Quality of Construction/Workmanship
    - ✦ Square Footage
  - Depreciation
    - ✦ Age
    - ✦ Condition
  - Location Adjustment
    - ✦ Map Factor
  - Annual Sales Analysis
    - ✦ Sales Countywide and in each City/Township are used to determine if our map factors need to change.

# What is the Overbuilt Factor?



- A way to adjust the value of higher end/larger homes in our area. This is done because of a lack of sales of these types of homes.
- The overbuilt base value is \$250,000 for the house and garages.
- Any value over the base is reduced by 50%.

# Overbuilt Factor Example

Land: \$40,000  
House/Garage: \$320,000  
Outbuilding: \$10,000  
Total: \$370,000

% of Land to Total

$$\frac{\$40,000}{\$370,000} = 11\%$$

House and Garage only

$$\begin{aligned} \$320,000 - \$250,000 &= \\ & \$70,000 \end{aligned}$$

Reduce by 50%

$$\$70,000 / 2 = \$35,000$$

$$\begin{aligned} \$250,000 + \$35,000 &= \\ & \mathbf{\$285,000} \end{aligned}$$

$$\begin{aligned} \text{New Parcel Total} &= \\ & \mathbf{\$335,000} \end{aligned}$$



# Overbuilt Factor Statistics:

- 2016 Assessment
  - Overbuilt Factor applied to 157 homes
  - 2% of homes in the county
- Prior to CAMA, the Overbuilt Factor base level was at \$120,000 and \$160,000.
  - This was approximately 20% of homes
  - 1 out of every 5 homes
- In the last two years
  - 12 homes between \$250,000 - \$300,000 have sold
  - 4 homes over \$300,000 have sold



How is the  
Overbuilt  
Factor  
base level  
determined?

- Years ago, the base level was the top end of value our market could support (there were no sales over that amount).
- Recently the \$250,000 base level was determined by analyzing sales in this bracket.
- We will continue to monitor this to see if the level is too high or too low.
- Or if the method should change.

# Time Trend Analysis



- Assessment Date is January 2<sup>nd</sup>. We're using sales from up to 14 months prior to this date.
- Time trend analysis is done by DOR to see if our market is getting **stronger or weaker over time**.
- If there is a trend, DOR will adjust the sale prices forward to the assessment date so that when doing ratio analysis, it's as if all of the properties **sold on the assessment date**.

# 2016 Countywide Residential Time Trend

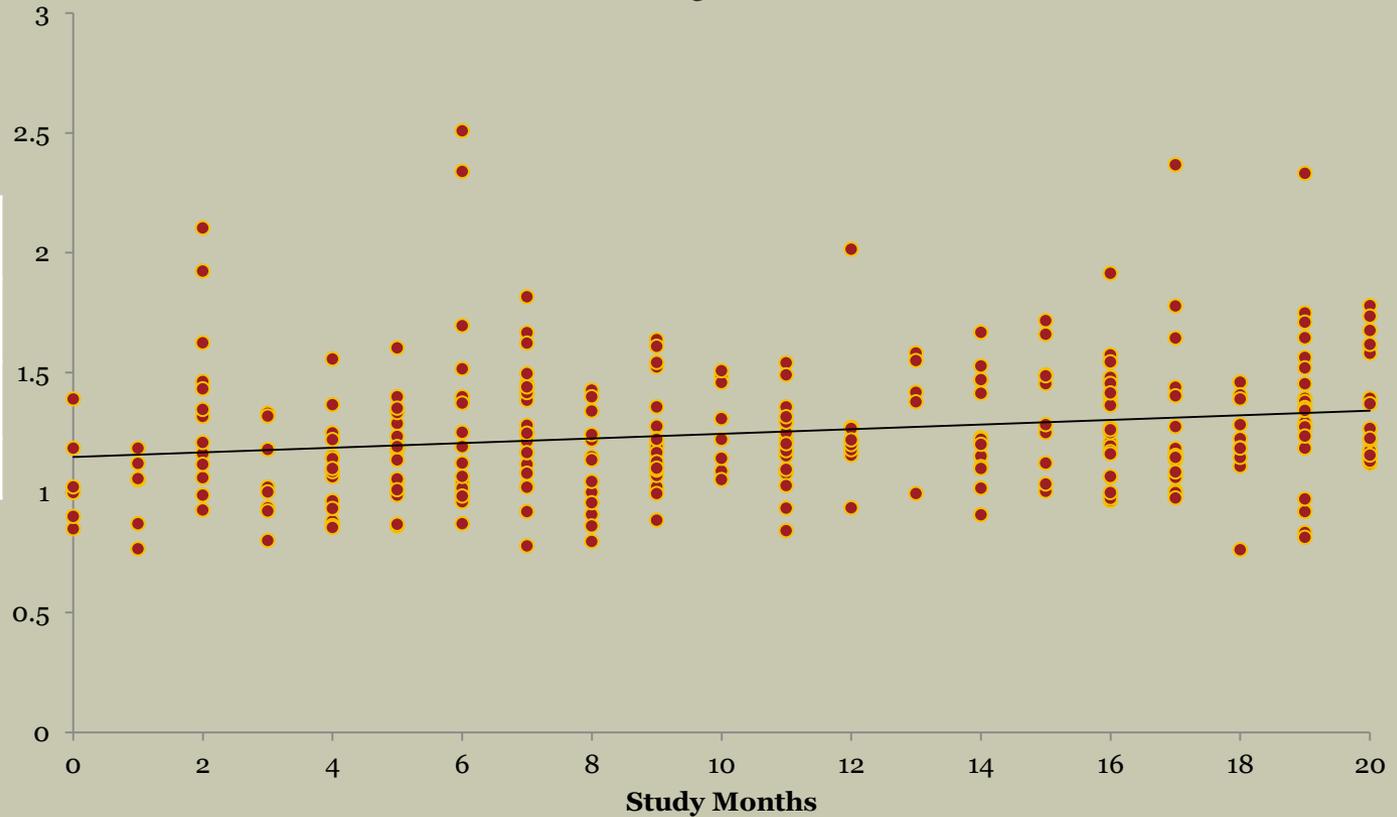


## Market Adjustment

Sale Count (Must have at least 30)	294
Significance Level (Must be over 90%)	99%
Monthly Trend	0.79%
Annual Trend	9.96%

**2015: +5%**

**2016: +10%**



# Assessment Changes for 2016: Residential



**Residential  
Time Trend:**

**Positive**

**9.96%  
Annually**

<u>Township</u>	<u>% Increase</u>	<u># of Sales</u>	<u>Original Ratio</u>	<u>New Ratio</u>
Jadis	23%	7	79.4%	94.1%
Lake	Converted to CAMA	27	82.0%	93.3%
Laona	Converted to CAMA	8	74.3%	91.9%
Malung	Converted to CAMA	5	70.6%	88.7%
Moranville	Converted to CAMA	14	85.8%	98.6%
Spruce	44%	4	67.6%	94.0%
Badger	15%	6	84.1%	94.4%
Greenbush	21%	6	75.5%	92.4%
Roseau	23%	39	78.3%	92.7%
Warroad	22%	27	80.8%	96.4%
<b>Countywide</b>	<b>177 Sales</b>		<b>80.4%</b>	<b>93.1%</b>

# Assessment Changes for 2016: Agricultural



**Agricultural  
Time Trend:**

**Negative**

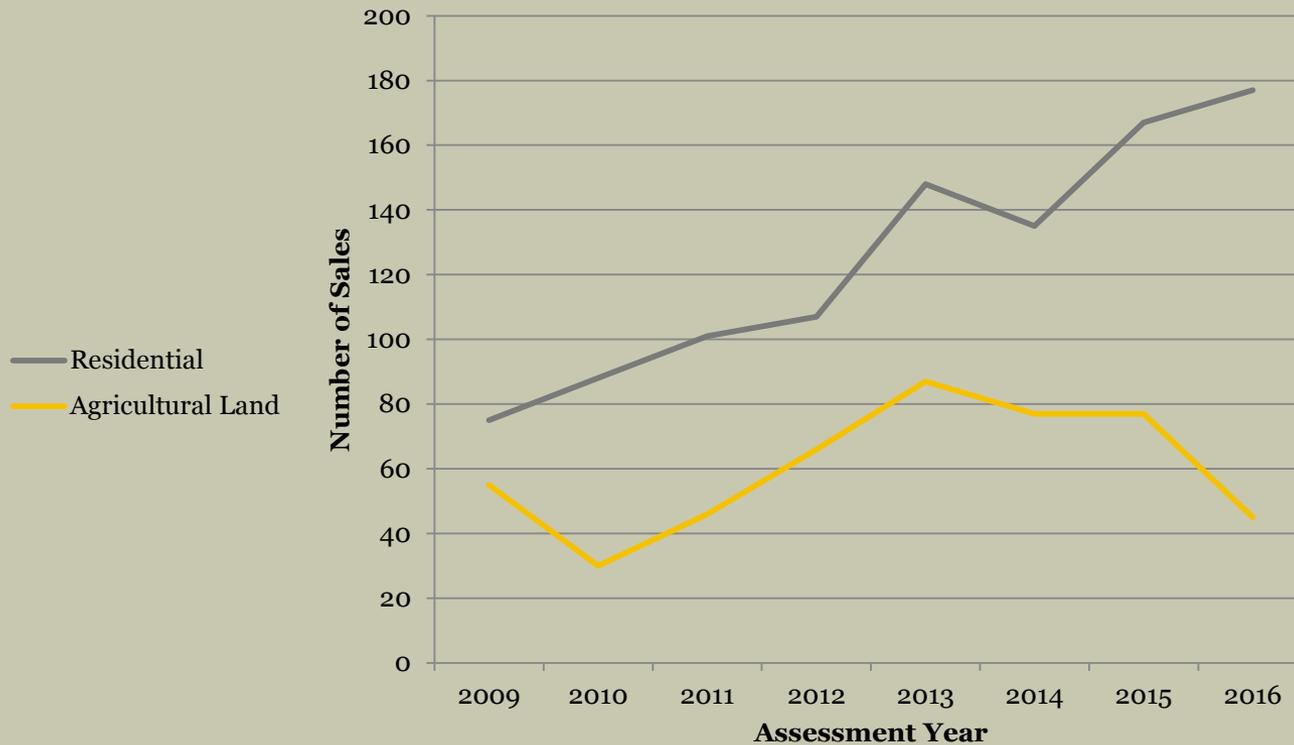
**7.84%  
Annually**

<u>Township</u>	<u>Tillable Change</u>	<u># of Sales</u>	<u>Original Ratio</u> (w/Trend)	<u>New Ratio</u> (w/Trend)
Hereim/Greenbush	-\$50	2	103.2%	99.2%
Lake/Warroad	-\$20	3	105.0%	103.2%
Lind	-\$10	2	103.6%	102.5%
Laona/Roosevelt	-\$100	1 *Improved	102.9%	106.2%
Moranville	-\$150	5	133.8%	111.6%
The new ratio without the trend would be lower than the "new ratio with trend" listed above.				
			RATIO	RATIO
<u>State Study Groupings:</u>		<u># of Sales</u>	<b>Without</b> Trend	<b>With</b> Trend
Rural Vacant Land		16	97.5%	103.3%
Ag & RVL - No Improvements		32	96.8%	104.7%
Ag Improved & Unimproved		45	96.8%	101.0%

# Historical Sale Counts (Arms Length Transactions)



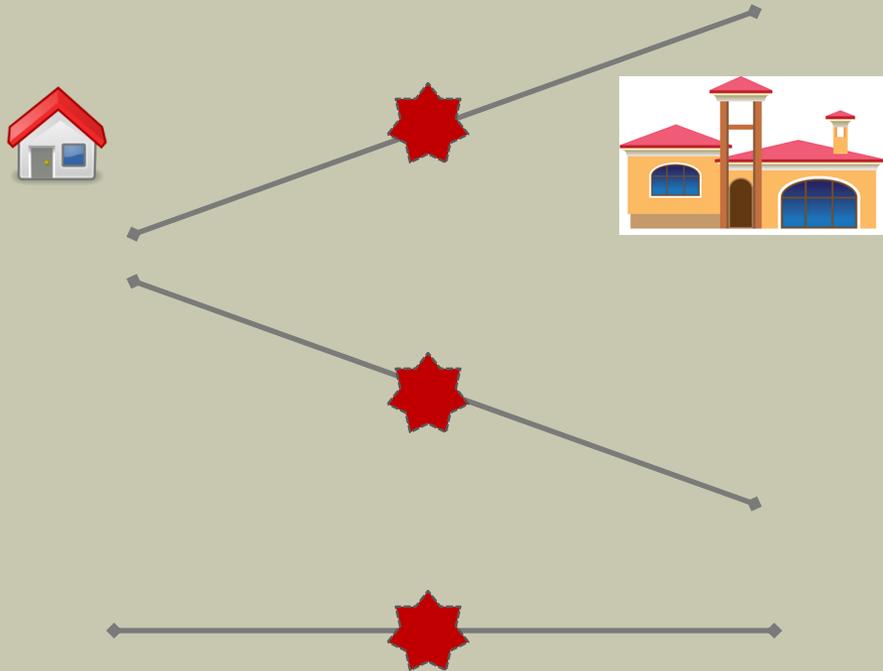
Assessment Year	2009	2010	2011	2012	2013	2014	2015	2016
Residential	75	88	101	107	148	135	167	177
Agricultural Land	55	30	46	66	87	77	77	45



# Quality of Assessment: STATISTICS!

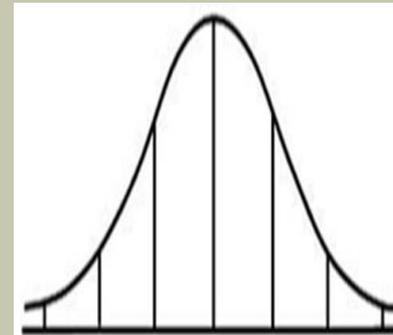
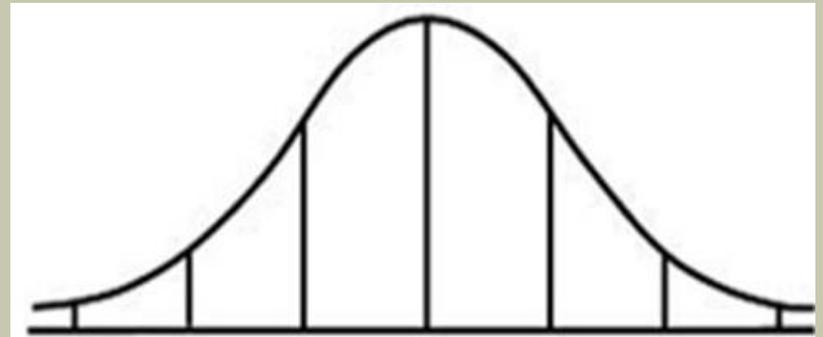


## PRICE RELATED DIFFERENTIAL



**MEASURE OF BIAS**

## COEFFICIENT OF DISPERSION



**MEASURE OF UNIFORMITY**



## Price Related Differential

Shows bias between higher valued or lower valued homes.

Mean/Weighted Mean

**PRD is  
Measure  
Of  
BIAS**



Greater than 1.03

Regressive Tax

Under Valuing Higher valued homes

Over Valuing Lower valued homes

1.03



Acceptable

Range is

**BETWEEN**

1.00

0.98

and

1.03

0.98

Less than 0.98

Progressive Tax

Under Valuing Lower valued homes

Over Valuing Higher valued homes



# Roseau County

## Historical

## Price Related Differential

## Statistics



Greater than 1.03

Regressive Tax

Under Valuing Higher valued homes

1.03

**2014** Countywide PRD **1.05**  
**2015** Countywide PRD **1.04**

Flagged by the DOR as being high

1.00

2016 Countywide PRD 1.00

This is an improvement to the  
*QUALITY* of our assessment.

0.98

Less than 0.98

Progressive Tax

Under Valuing Lower valued homes



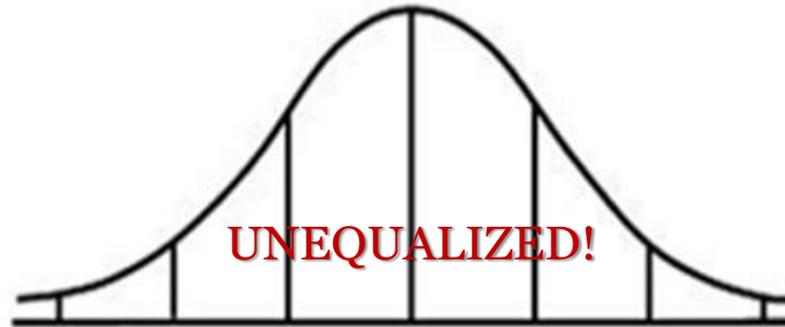


## Coefficient of Dispersion

How dispersed around the median are the other ratios.

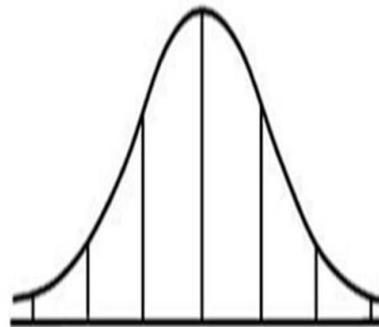
$AAD / \text{median} \times 100$

**COD is  
Measure  
Of  
UNIFORMITY**



LESS THAN

15 is  
Acceptable



**2014** Countywide COD **16.9**  
**2015** Countywide COD **18.3**

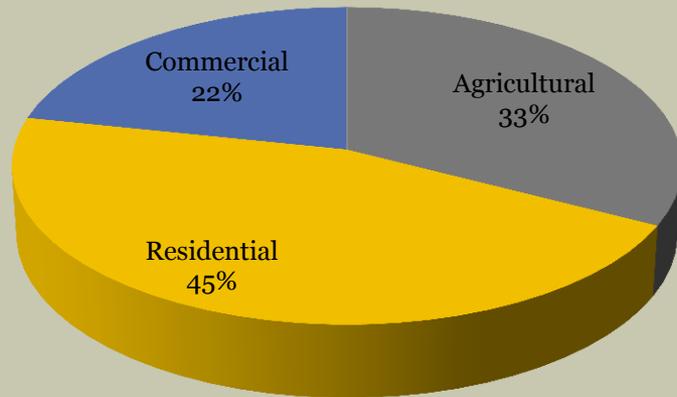
Flagged by the DOR as being high

2016 Countywide COD 11.70

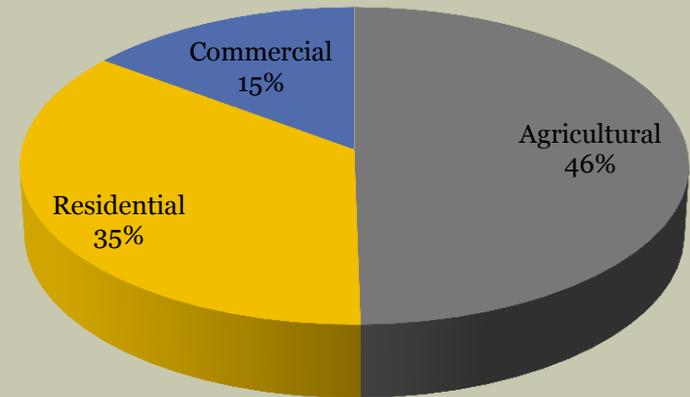
This is an improvement to the  
*QUALITY* of our assessment.

# % Share of Tax Base by Property Type

**2005**



**2015**



This meeting is not about taxes,  
it's about Market Value



**BUT....**

# Relationship between Your EMV and Your Tax

Estimated Market Value  
(Less Homestead Exclusion)

=

**Taxable Market Value**

X

State Classification Rate

=

**Net Tax Capacity**

Taxing Entities:

County, City/Township, School  
District, Watershed

Total Tax Capacity:

Sum of all Net Tax Capacities  
within each Taxing Entity

Levy:

\$\$ to be collected by each Taxing  
Entity (Budget)

**Levy/Total Tax Capacity = Tax Rate**

**Your Net Tax Capacity X Tax Rate = Tax**