

# CER to CPI Conversion

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# Renville County

- Renville County Characteristics
  - Approx 640,000 acres in size
  - Approx 88% tillable Farmland
  - Highly Productive Soils
  - Main crops include corn, soybeans, sugar beets, edible beans, peas & sweet corn.

# Renville County

- Renville County Land Values
  - Cash Rents exceeding \$500/acre
  - Land sales exceeding \$10,000/ac
    - Currently 65 bare land sales with a median sale price of \$10,671/till ac
  - Drainage and tiling
    - Thousands of feet of private tiling

# Renville County

- Because of the high cash rents and high land values, farmers need to utilize productivity of land to its fullest potential.

# Why Renville County is making transition from CER's To CPI's to value tillable land

- CER – Reflects a level of management in its rating, not purely related to the soil.
- CPI – is purely based on raw productivity of the soil
  - Management is removed from valuation
  - Assumes similar drainage

# Why Renville County is making transition from CER's To CPI's to value tillable land

- CER's are no longer supported
- CPI's are being supported and maintained by BWSR and NRCS.
- Sales Data Shows CPI's are more accurate

# Sales Research

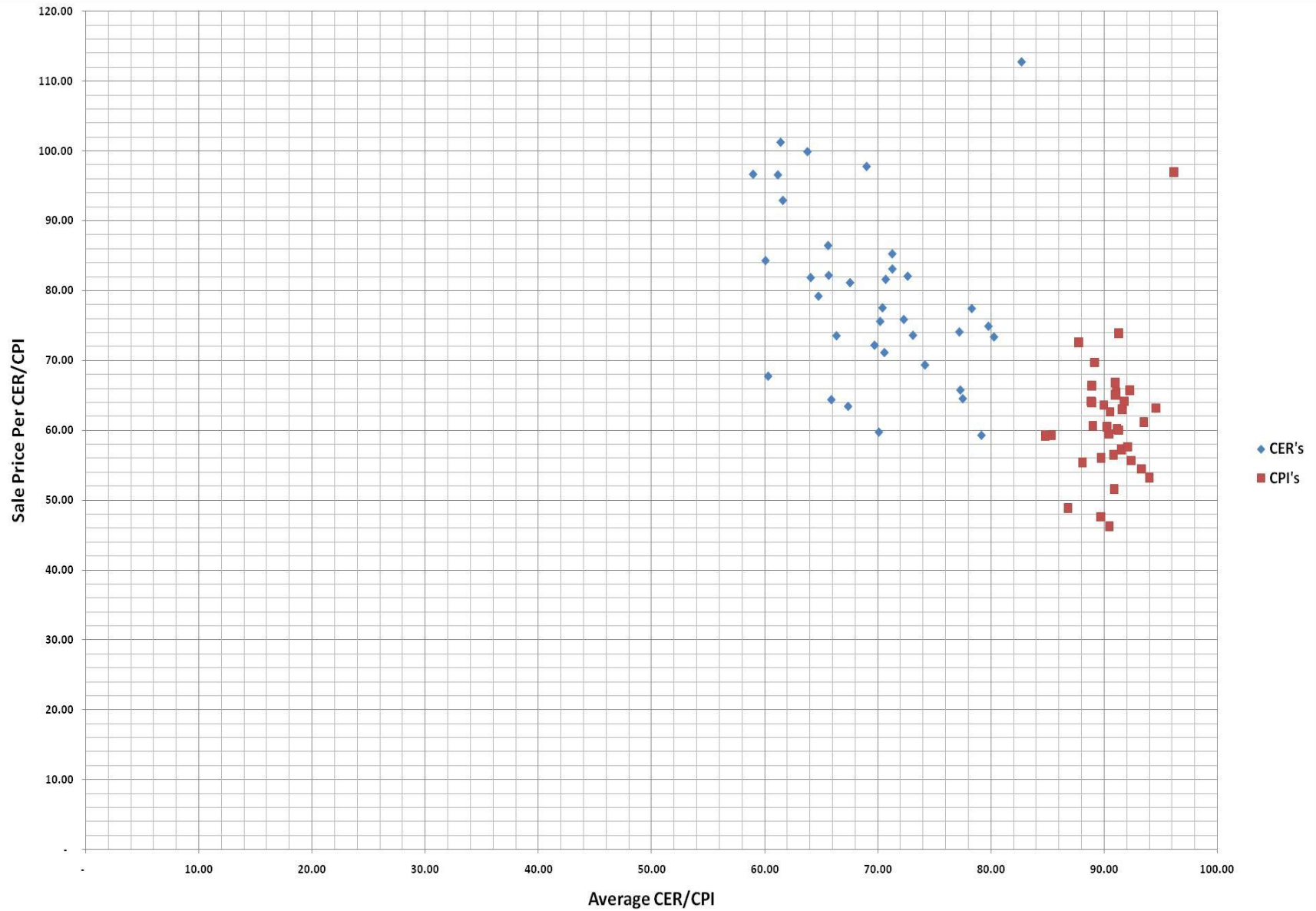
## Renville County Land Sales

### 10/2010 – 9/2011

### 43 Sales-summary

	SP/Deed AC	Ratio	SP/Till AC	CER	SP/CER	CPI	SP/CPI	DEV From Med SP/CER	DEV From Med SP/CPI
AVE	5,180	86.89	5,504	69.14	79.31	90.02	61.04	9.48	5.60
Median	5,297	82.48	5,469	69.72	78.22	90.84	60.48	6.07	4.02

# Scatter Graph - Sales 10/2010 thru 9/2011





# Sales Research

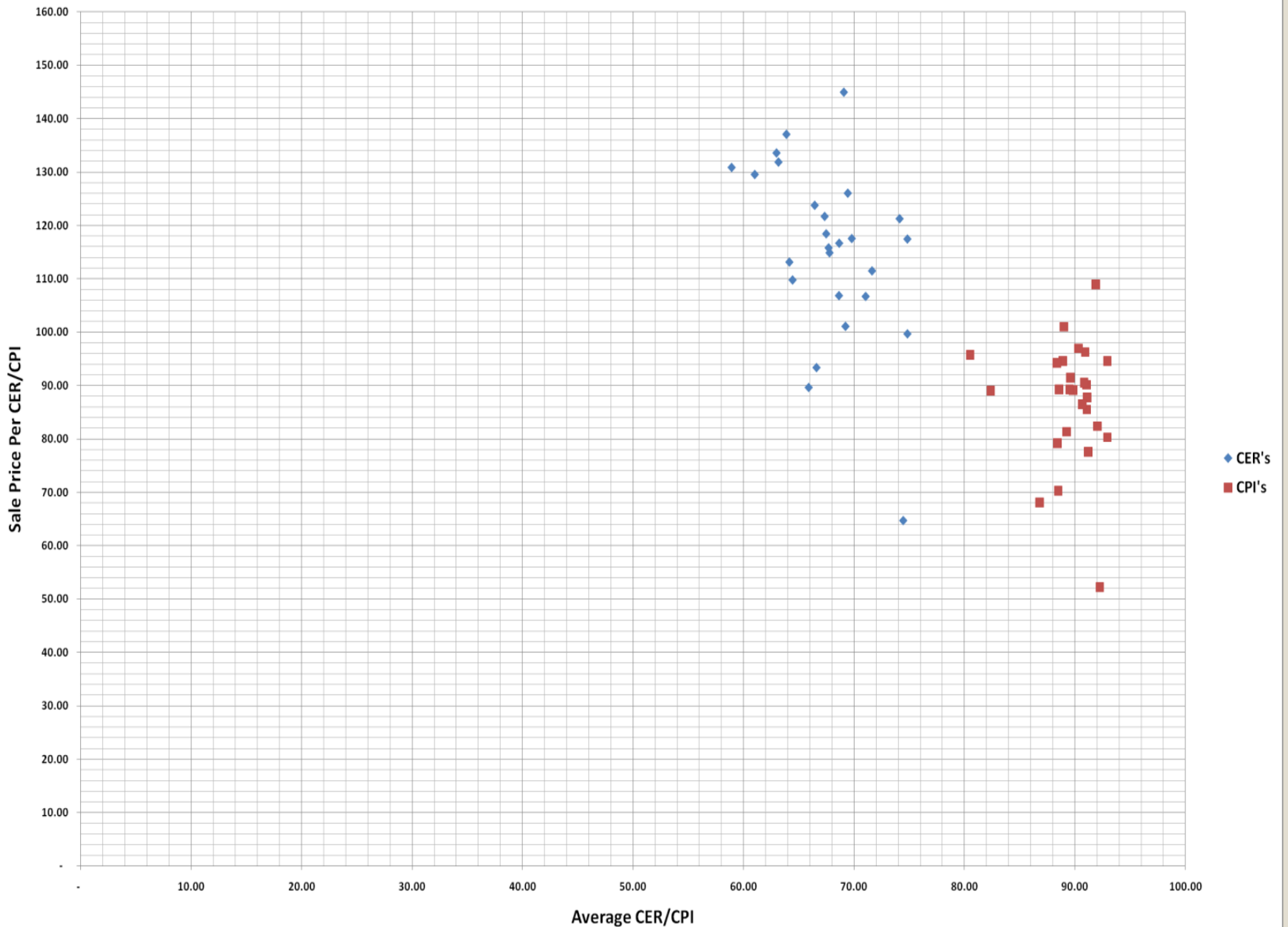
## Renville County Land Sales

### 10/2011- 9/2012

### 28 Sales-summary

	SP/Deed AC	Ratio	SP/Till AC	CER	SP/CER	CPI	SP/CPI	DEV From Med SP/CER	DEV From Med SP/CPI
AVE	7,261	72.10	7,784	67,82	79.31	89.75	86.76	11.43	7.68
Median	7,533	70.48	7,946	67.75	78.22	90.41	89.12	8.64	6.05

# Scatter Graph – Sales 10/2011 thru 9/2012



# Sales Research

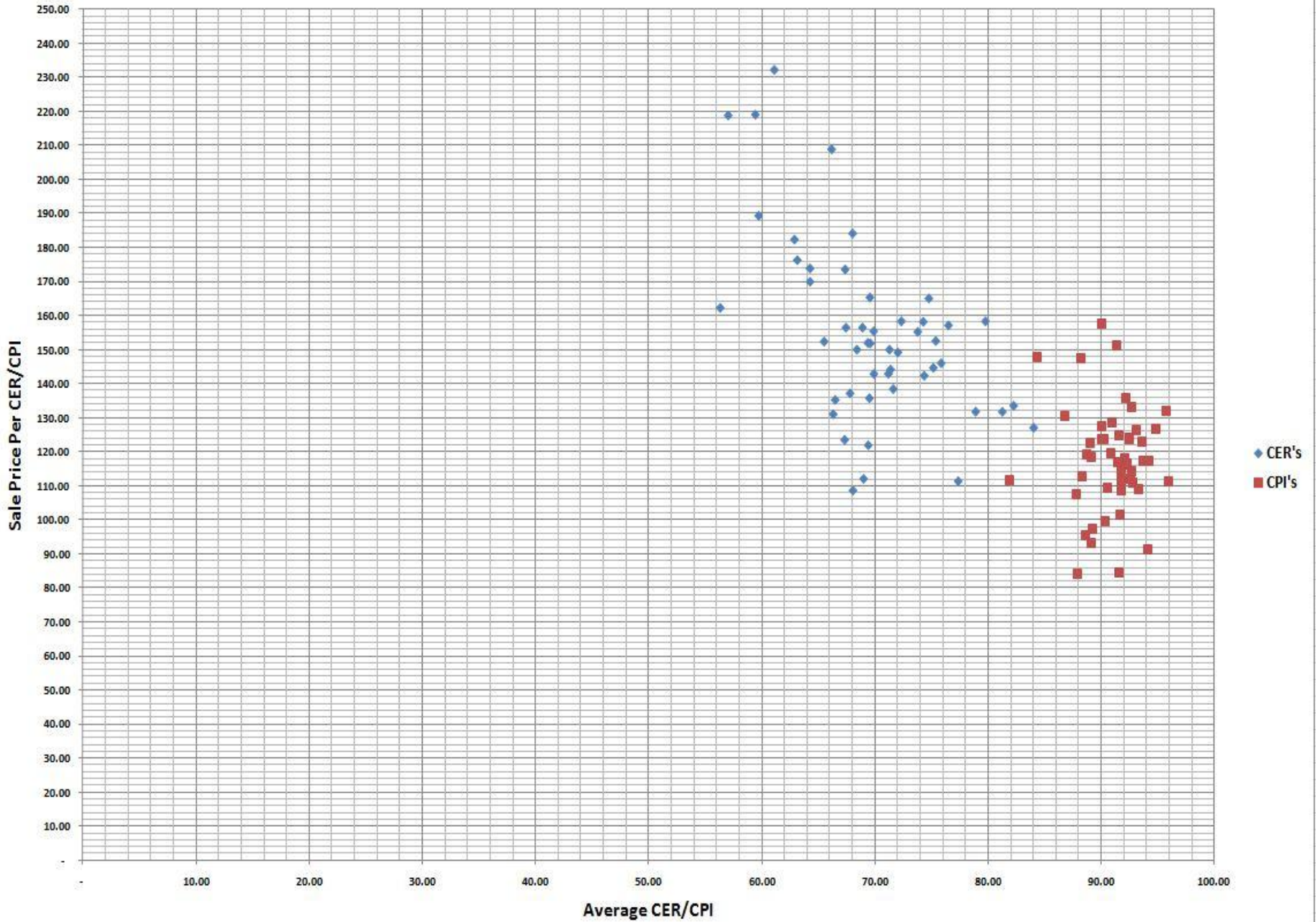
## Renville County Land Sales

### 10/2012- Current

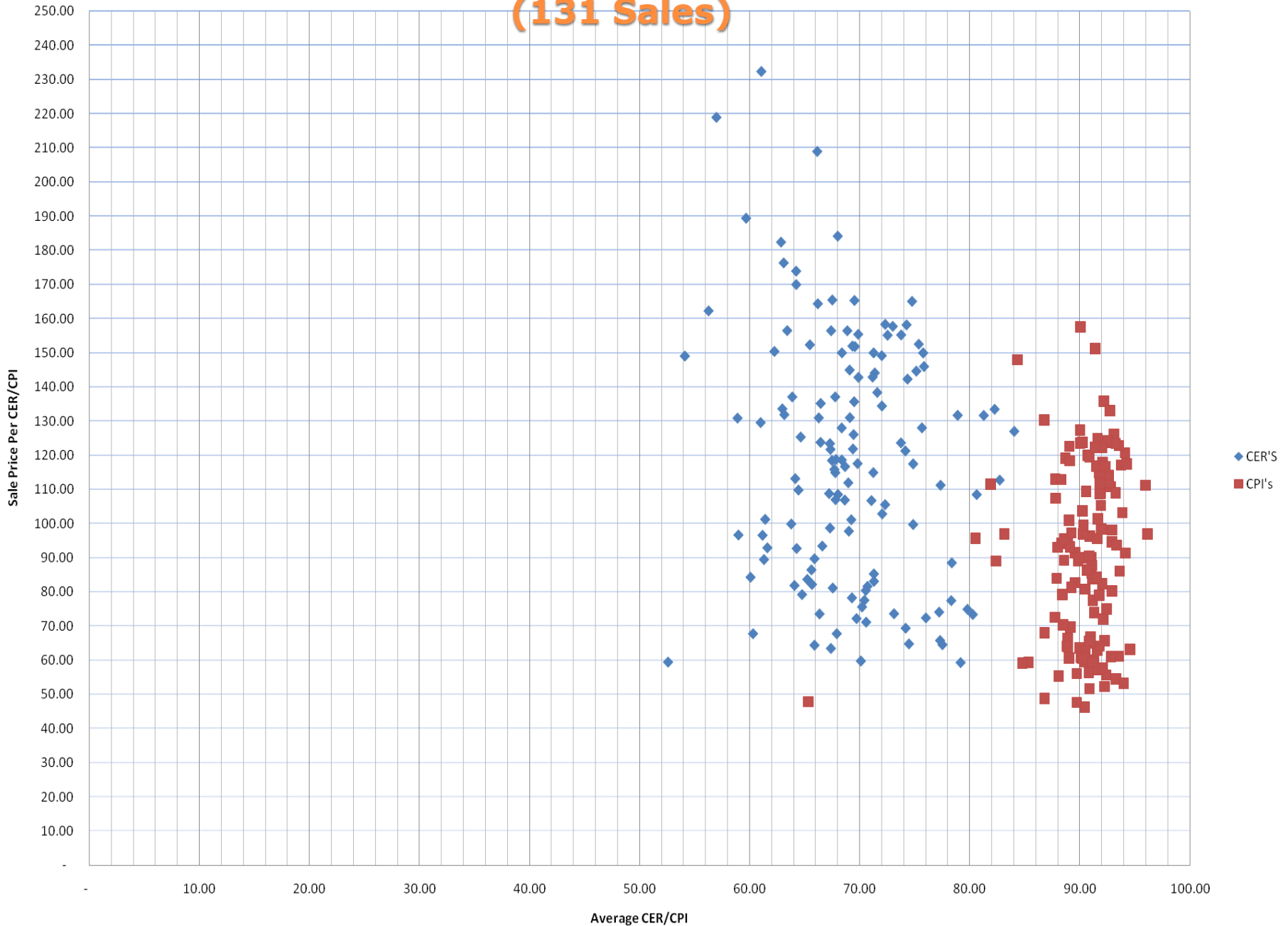
### 65 Sales-summary

	SP/Deed AC	Ratio	SP/Till AC	CER	SP/CER	CPI	SP/CPI	DEV From Med SP/CER	DEV From Med SP/CPI
AVE	9,974	64.12	10,388	69.56	150.34	90.66	114.44	19.21	12.33
Median	10,100	62.75	10,671	69.5	149.97	91.66	116.60	15.07	7.92

# Scatter Graph – Sales 10/2012 thru Current



# Scatter Graph – Sales 10/2010 thru Current (131 Sales)



# Example of the Process of Calculating a CPI



Tillable Attributes X

**Update Information for Tillable Feature:**

PINDASH:	<input type="text" value="16-01100-00"/>	ACRES:	<input type="text" value="115.42"/>
CODE:	<input type="text" value="Tillable"/>	DEEDACRES:	<input type="text" value="120"/>
PIN:	<input type="text" value="160110000"/>	ACRES_ADJ:	<input type="text" value="116"/>
CALCCER:	<input type="text" value="0"/>	CNTY_NAME:	<input type="text" value="Renville"/>
CER X ACRES:	<input type="text"/>	Township Name:	<input type="text" value="Kingman"/>
CALCCPI:	<input type="text" value="91.985"/>	EDIT_DATE:	<input type="text" value="6/1/2009"/>
CPI X ACRES:	<input type="text" value="10616.909"/>	TYPE:	<input type="text" value="0"/>





FIELD ESTIMATES

PIN = 16-01100-00      Date Created: 4/30/2013  
 Owner: COSGRIFF/J A/JR TRUST

County: Renville    Township: KINGMAN

Code	Symbol	Soil Name	Acres	CPI	CER
1	899	HARPS-OKOBOJI, DEP., COMPLEX, 0 TO 2 % SLPS	31.08	89	58
2	920B	CLARION-STORDEN-HAWICK COMPLEX, 2 TO 6 % SLPS	0.61	72	62
3	446	Normania loam, 0 to 3 percent slopes	29.38	99	88
4	927	HARPS-SEAFORTH-OKOBOJI, DEP., COMPLEX, 0 TO 3 %	13.39	90	58
5	134	Okoboji silty clay loam, depressional, 0 to 1 pe	9.49	86	56
6	1355B	AMIRET-SWANLAKE COMPLEX, 2 TO 6 % SLPS	1.33	92	76
7	113	Webster clay loam, 0 to 2 percent slopes	13.25	93	77
8	423	SEAFORTH LOAM, 1 TO 3 % SLPS	0.11	95	86
9	1900	OKOBOJI-CANISTEO COMPLEX, DEP., 0 TO 1 % SLPS	3.37	86	54
10	1370B	AMIRET LOAM, 2 TO 5 % SLPS	1.91	98	80
11	112	HARPS CLAY LOAM	11.5	90	61

Crop Productivity Index = 91.99  
 Crop Equivalency Rating = 68.46

Adjusted Acres = 116  
 Total GIS Acres = 115.42

\* Indicates the CER/CPI value was manually changed.

## Parcel CPI/CER Information



PROD MICHIGAN

PRN - 16-01100-00 Date Created: 4/30/2013  
Owner: COBGENCO/A/AM ROAD

County: hennepin township: edenpark

Code	Symbol	Soil name	Acres	Cor	Com
1	222	Scarsdale-Crookston, cbr., Colerain, 0 to 2 & S&S	31.04	66	56
2	220a	Clanburg-Holmes-Scarsdale Colerain, 2 to 4 & S&S	0.40	70	62
3	444	Waukegan loam, 0 to 2 percent slopes	28.39	66	64
4	227	Scarsdale-Crookston-Crookston, cbr., Colerain, 0 to 3 &	13.39	60	54
5	334	Okoboji silty clay loam, depressional, 0 to 1 p	2.42	66	56
6	135m	Amherst-Hesperian Colerain, 2 to 4 & S&S	1.33	66	74
7	111	Wabeno clay loam, 0 to 2 percent slopes	13.25	62	77
8	413	Scarsdale silt, 1 to 3 & S&S	0.11	65	66
9	1900	Crookston-Crookston Colerain, cbr., 0 to 1 & S&S	3.37	66	54
10	1370a	Amherst loam, 2 to 3 & S&S	1.41	64	60
11	112	Scarsdale clay loam	11.5	60	61

Crop productivity index - 81.28

Crop equivalency rating - 68.46

Adjusted Acres - 116

total Gen Acres - 115.42

- indicates the Cor/Com value was manually changed.

# **Entering the data into the Land Calculation Module**

LC011

Land Class Breakdown Maintenance

5/09/13

Town/City/Zone 16 KINGMAN Twp Adj (2) \_\_\_\_\_

CER Range	Mult#1 (3)		Mult#2 (3)		Mult#3 (3)	
	CER	GA	CER	GA	CER	GA
1 TO 999.99	<u>139784</u>	<u>139784</u>	_____	_____	_____	_____

Bottom

F1=Diff Zone F3=Exit F4=Inact/Activate

LC020

Land Calculation Parcel Maintenance

5/09/13

Parcel/Rec # 16 - 110000 / 1 Zone #\* 16 Category\* 1 Avg CER(2) 6846  
F2=Prompt F3=Exit F6=Next Parcel F12=Previous F18=Prev Parcel









# Costs of Conversion

- Base layer from FSA office – No Cost

*\*\*\*note – map layer was acquired in 2000 – unable to get currently\*\*\**

- Initial map layer (Bonestroo & Associates)
  - Application and Development = \$12,500
  - Technical Support/Training = \$?????
- Pro-West & Associates, Inc.
  - Original application = \$10,000
  - Upgrade to 9.x & 10.x version \$3,500 each upgrade
- Time
  - Estimated 1 person could do 1 twp in a week
    - 40 hrs per twp
    - 27 townships
      - 1,080 hours for complete recalculation & conversion

*If you have knowledgeable staff with employee(s) having GIS knowledge, this method is relatively inexpensive*

Questions???