

★ Roll Call Number

Agenda Item Number  
55

Date January 26, 2009

Receipt of the 2008 Polk County Assessor Annual Report.

Moved by \_\_\_\_\_ to receive and file attached report.

COUNCIL ACTION	YEAS	NAYS	PASS	ABSENT
COWNIE				
COLEMAN				
HENSLEY				
KIERNAN				
MAHAPPEY				
MEYER				
VLASSIS				
TOTAL				

MOTION CARRIED

APPROVED

\_\_\_\_\_  
Mayor

### CERTIFICATE

I, DIANE RAUH, City Clerk of said City hereby certify that at a meeting of the City Council of said City of Des Moines, held on the above date, among other proceedings the above was adopted.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my seal the day and year first above written.

\_\_\_\_\_  
City Clerk

***POLK COUNTY ASSESSOR***

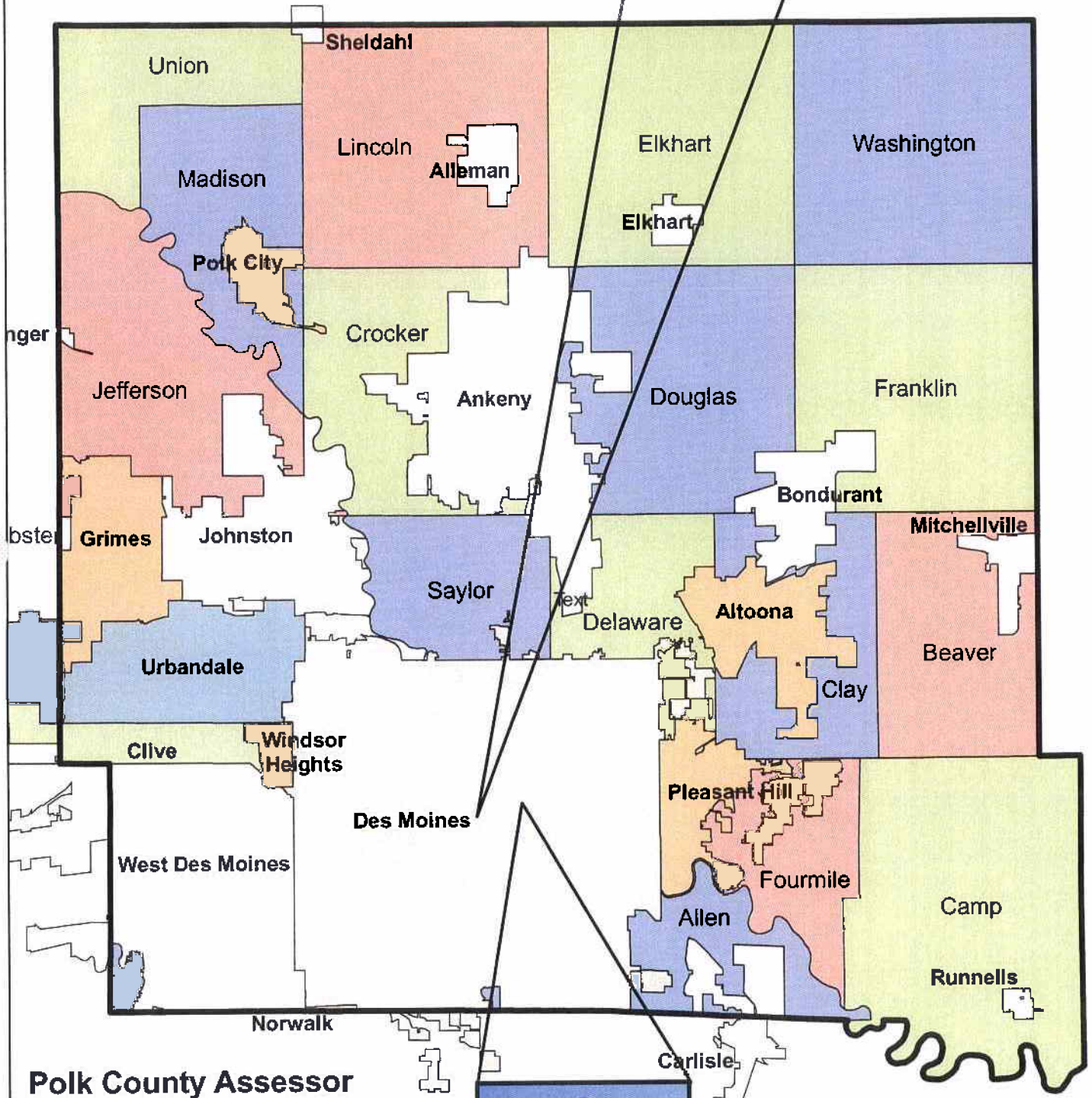
***ANNUAL REPORT***

***2008***

# Polk County Corporate Boundaries and Township Boundaries



2005 High Resolution  
0.40' pixel color aerial  
photography



Polk County Assessor  
10/01/2007

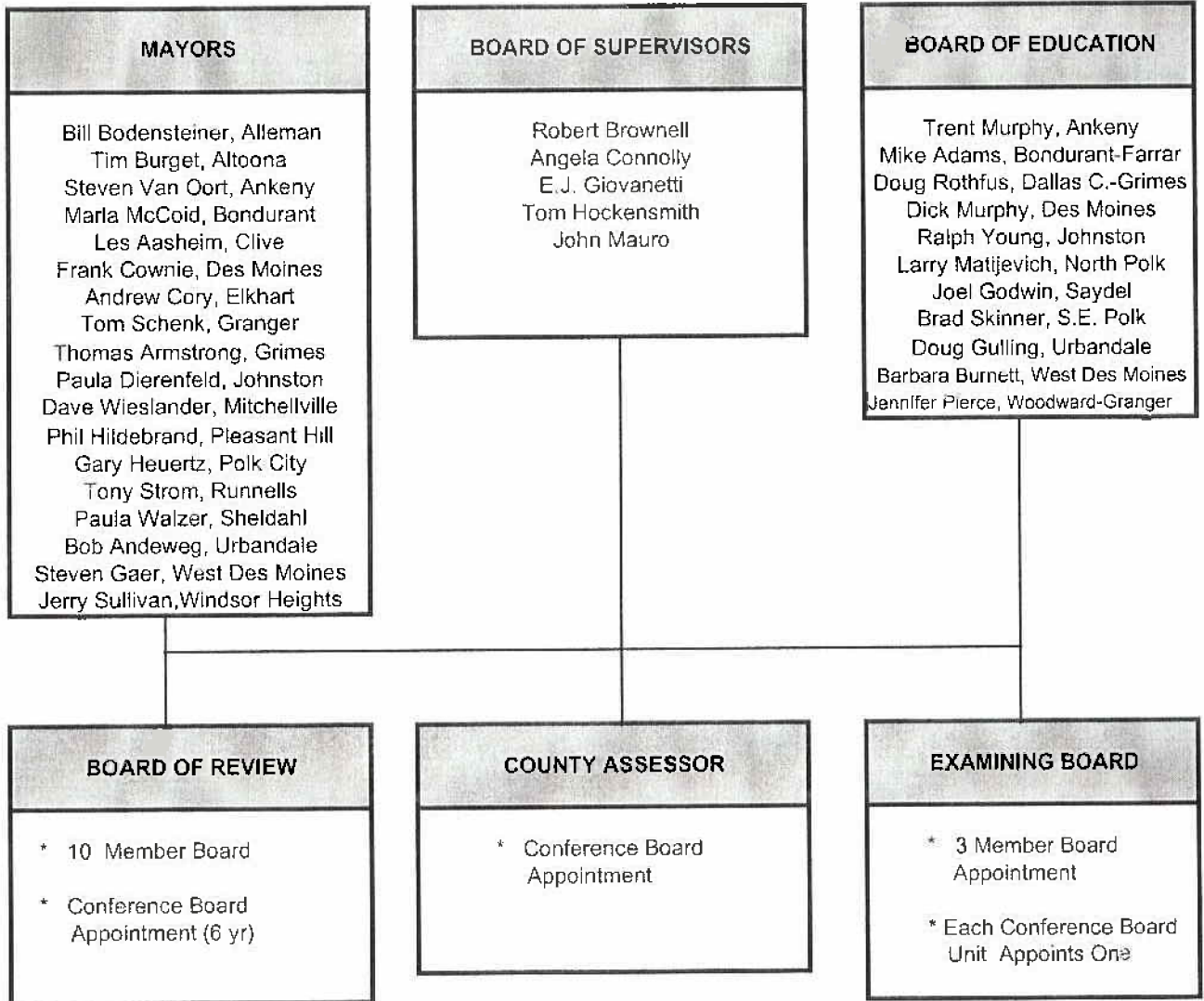


**2008 REPORT  
OFFICE OF POLK COUNTY ASSESSOR**

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**POLK COUNTY CONFERENCE BOARD  
2008**





**STAFF OF POLK COUNTY ASSESSOR'S OFFICE  
MEMBERS, BOARD OF REVIEW AND BOARD OF EXAMINERS  
DES MOINES, IOWA  
2008**

**ASSESSOR'S OFFICE**

*Administration*

Jim Maloney, ASA, ICA  
County Assessor

Randy Ripperger, CAE, ICA  
Chief Deputy

Tammy Borenguel, Support Supervisor  
Tracy Culbertson, Residential Deputy Assessor  
Rhonda Duncan, Supervisor Real Estate Department  
Paul Humble, ICA, Residential Deputy Assessor  
Ruth Larsen, Database Administrator  
Kelly Low, Accounting Manager  
Rodney Hervey, ICA, Commercial Deputy Assessor  
Mark Patterson, CCIM, ICA, Commercial Deputy Assessor  
Bryon Tack, ICA, MAI, CAE, Commercial Deputy Assessor  
Amy Thorne, ICA, Residential Deputy Assessor  
James Willlett, ICA, RES, Residential Deputy Assessor

*Appraisers*

Douglas Askew, Residential Appraiser II  
John Catron, Residential Appraiser II  
Michael Caulfield, ICA, Commercial Appraiser III  
Rich Colgrove, Residential Appraiser III  
Jason Connolly, Appraiser I  
Patrick Harmeyer, ICA, Commercial Appraiser II  
Michelle Henderson, Residential Appraiser I  
Paul O'Connell, Residential Appraiser I

Kathryn Ramaekers, Residential Appraiser II  
Michelle Richards, ICA, Commercial Appraiser II  
Regina Russell, Residential Appraiser II  
Cathy Stevens, ICA, RES, Residential Appraiser III  
Keith Taylor, ICA, Residential Appraiser II  
Brett Tierney, Residential Appraiser I  
Patrick Zaines, ICA, Agricultural Appraiser

*Office Personnel*

Caroyle Andrews  
Vincent DeAngelis  
Jackie Fontana  
Kim Heffernan  
Jill Mauro

Comm. Support Specialist  
Tax Information Spec.  
Permits Coordinator  
Support Specialist  
Computer Support Spec

Terry Powell  
LaRayne Riccadonna  
Rebecca Smith  
Julie Van Deest  
Ray Willis

Transfers Coordinator  
Database Specialist  
Residential Sales Coord  
Exemptions Coordinator  
GIS Coordinator

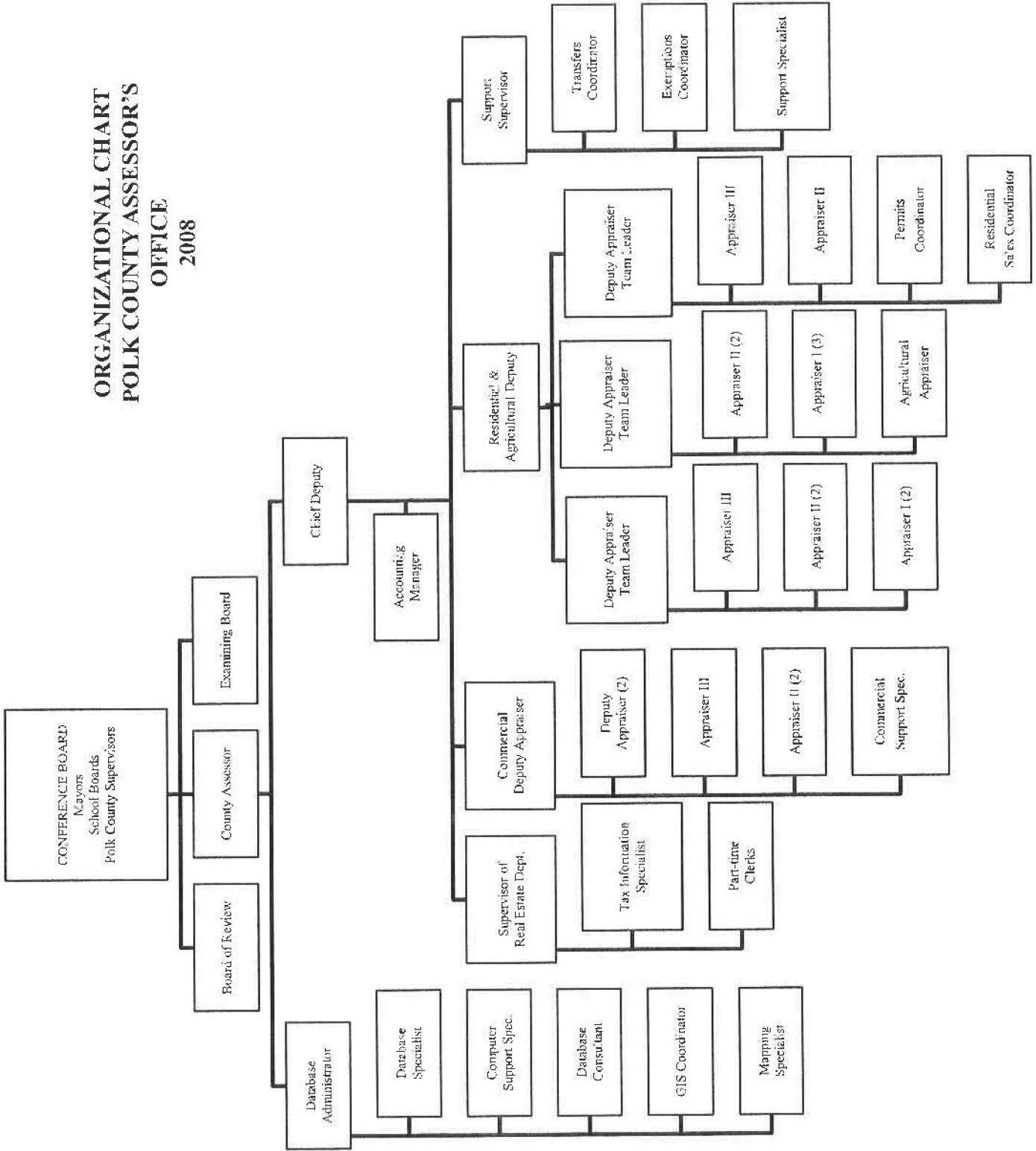
***Board of Review***

Lora Jorgensen  
John Lundstrom  
Ruth O'Brien-German  
Everett Sather  
Charles Speas  
Dee Dee Steger  
John Tiefenthaler  
Leslie Turner  
Lee Viggers  
Max Wright

***Board of Examiners***

Art Hedberg  
Frank Smith  
Vacancy

**ORGANIZATIONAL CHART  
POLK COUNTY ASSESSOR'S  
OFFICE  
2008**



To: Members of the Conference Board

From: Jim Maloney

Date: December 1, 2008

Subject: Annual Report

Attached is the 2007/2008 annual report for the Polk County Assessor. I hope you find this information useful and interesting, and that you will contact me if you have any questions.

Here are some highlights of our year, and commentary on a few noteworthy issues:

- **Residential and commercial valuations hold steady.** 2009 is an assessment year; revaluation notices will be mailed to all property owners in April. Many people will mistakenly assume their assessments should decrease because of all the negative news about real estate. But the market here has held up better than in most other areas of the U.S. While assessed values are not going up much (if any) for most people, they're not going down, either. Our data shows that the market is flat in terms of prices, and that sales are very slow.

Property owners who wish for a lower assessment likely don't think through the implications, as that means their real estate investment has declined in value – a situation that is not enviable either. Our office plans to proactively communicate the situation with property owners and the public, and is prepared to handle more questions than usual during this cycle. It is hard to predict if there will be more protests than usual.

- **Agricultural values increasing significantly.** Ag land values are not based on market value, but on productivity and income. Because commodity prices have risen over the 5-year period used to calculate valuations, agricultural assessments are taking quite a jump. In Polk County, we anticipate the average increase will be about 66 percent (that figure could still change). However this doesn't mean property taxes themselves will increase by a similar percentage, because rollbacks limit the amount the aggregate taxable valuations of a classification of property can go up in any given year. In short, tax increases will be limited by the rollback.
- **Lawsuit resolved.** You have likely heard me discuss a lawsuit we filed against the Iowa Department of Revenue. We challenged a controversial ruling that mandated property be assessed at its "value-in-present-use" rather than its market value. We're pleased that the lawsuit was resolved in our favor, and that the "market value" standard for assessments will continue to apply. (Read more about this case in 2008 issues of our *RealTalk* newsletter, archived on our Web site at [www.assess.co.polk.ia.us](http://www.assess.co.polk.ia.us))



- **Guidance Needed.** We continue to seek guidance from the Iowa Department of Revenue on various issues, such as better defining agricultural classifications. Currently, it's challenging to determine if a small acreage where a few sheep are raised should be classified as agricultural or residential. We use our best judgment, based on our experience, but sometimes our decisions are overruled because it's very unclear as to what constitutes a bona-fide agricultural operation. As such, the Iowa State Association of Assessors (ISAA) is seeking help from Realtors, the Iowa Farm Bureau and other groups to lobby for guidance that will ensure more consistency.
- **PAAB.** We continue to monitor the progress of the statewide Property Assessment Appeal Board (PAAB), which was instigated by the legislature and began operating in 2007. This board hears protests from property owners who protested an assessment decision and were still not satisfied with the outcome. In 2008, there were 1,046 assessment protests in Polk County, 61 of which continued on to the PAAB.
- **Flooding.** Fortunately Polk County didn't experience the widespread devastation from floods that some other areas of Iowa did this past year. Still, there were many property losses, and we continue to look at what impact this has on valuations in affected areas. One thing to remember is that the assessments are made based on the condition of the property as of January 1<sup>st</sup> of the year of the assessment. Thus, a property that is damaged by a spring flood and rehabilitated before the next year might be subject to an increase. Another thing to look for is if a previously flooded property carries a stigma that results in a loss of market value. The way to tell is to look at comparable sales – but there have been few sales in these areas. It will likely be several years before the impact on assessments is known. I cannot recall any lasting stigma from the floods of 1993, but it's something we still will monitor.

Please let me know if you have any questions. It is an honor and a pleasure to serve as Assessor in Iowa's most populous county, and I look forward to working with you in 2009 and beyond.

## 2009 GOALS

### Data Processing Department:

#### Office and Public Support

- Redesign our web site, integrating "web 2.0" and other new technologies.
- Develop online forms for submission of homestead and military credits, exemptions, and family farm credit.
- Continue to develop tools to extract data and simplify reporting.
- Find an alternative for presentations (problems with different PowerPoint versions and sound).

#### Mapping

- Establish a satisfactory working relationship with an aerial photography vendor.
- Develop a maintenance plan for credits (forest reserves, fruit trees, etc.).
- Set up a process for "publishing" a Sidwell map for use by abstractors and the public.

#### Administration

- Move to a network operating system with redundant and interchangeable servers.
- Increase our use of open source software.
- Move printing to new server using Cups.
- Install and setup new version of Postfix mail server.

### Residential Department:

- Complete phase II and start phase III of the drive-by review project over the next two years. Any changes as a result of this review will be reflected in the 2011 assessments.
- Identify and physically review the 2008 flood-damaged properties and make adjustments accordingly for the 2009 assessments.
- Review and update as necessary the procedures used for processing the anticipated increase in annual appeals to the Property Assessment Appeal Board.
- Identify the needs and develop procedures for a condo/townhouse field review by regime project.
- Update the cost approach system to comply with the Iowa Department of Revenue's *2008 Real Property Appraisal Manual*, which will be implemented for the 2011 revaluation.
- Review and revise where needed the sales screening methods and questionnaires.
- Develop a mass appraisal report for the 2009 residential assessments and have it available on the web site.
- Make available our monthly sales ratio study on the Polk County Assessor's Website.

### **Commercial Department:**

- Conduct on-site inspections of parcels that haven't been inspected within the last five years, verifying the listing data.
- Identify and physically review the 2008 flood-damaged properties and make adjustments accordingly for the 2009 assessments.
- Develop data entry procedures to improve listing consistency and uniformity.
- Develop a written policy on confidential information and make it available on our web site.
- Rate the physical condition and review the market values of hotels and motels, cell towers, warehouses, and cooperatives and condominiums that are operated as apartments with a residential classification.
- Continue the development of a mass appraisal report for the different occupancy groups of properties. Included in this report will be property identification methods, data verification procedures, statistical studies and the market analyses used in the development of the model(s) determining the property values.
- Continue the development and refinement of our computer-assisted mass appraisal (CAMA) system utilizing all three approaches to value. Reconstruct the sales approach analysis using current market-based adjustments. Update the cost approach analysis to comply with the *2008 Real Property Appraisal Manual* by 2011.
- Make available our monthly sales ratio study on the Polk County Assessor's website.
- Inspect, verify listing data, rate physical condition and review market values of at least 17% of the commercial, industrial and multi-family residential parcels. The goal of physically inspecting property at least once every six years should be met. The inspections will include parcels with sale transactions, building permits and the revaluation of the targeted occupancies.
- Review/update listings and values on all exempt properties.

### **Support Department:**

- Continue taking photos of new construction and refresh one-sixth of the photo database every year to insure property photos are as current as possible.
- Develop a written policy for forest reservations and post it on our web site.
- Review procedures and guidelines to determine agricultural classifications.
- Develop and implement project plan to review all agricultural classed property to ensure compliance with our agricultural classification guidelines.
- Review new aerial maps, flood easements, and flood boundaries to modify land uses on affected agricultural parcels.
- Review and modify exemption policies and procedures, as well as ongoing record maintenance, as necessary.

## ACTION OF THE 2008 BOARD OF REVIEW

The 2008 Board of Review considered 1046 protests and 74 recommendations.

Total value of real estate considered for protests		\$	3,266,505,360
Total number of protests by class of property:			
	Agricultural		19
	Residential		751
	Commercial		267
	Industrial		9
	TOTAL		1046
Number of protests denied			367
Number of protests upheld			679
Amount of reduction			
	Land	\$	27,535,500
	Improvements	\$	158,473,400
	Total amount of reduction	\$	186,008,900
Number of protests that received an increase			50
Amount of increase			
	Land	\$	261,360
	Improvements	\$	14,063,060
	Total amount of increase	\$	14,324,420
Total value of real estate considered for recommendations		\$	124,510,190
Total number of recommendations by class of property:			
	Agricultural		1
	Residential		72
	Commercial		4
	TOTAL		77
Number of recommendations for reductions			65
Amount of reduction			
	Land	\$	559,100
	Improvements	\$	2,996,250
	Total amount of reduction	\$	3,555,350
Number of recommendations for increases			9
Amount of increase			
	Land	\$	9,371,650
	Improvements	\$	1,296,420
	Total amount of increase	\$	10,668,070
Total Real Estate Protests Reduced		\$	(185,993,590)
Total Real Estate Recommendations Reduced		\$	(3,555,350)
Total Real Estate Protests Raised		\$	14,482,800
Total Real Estate Recommendations Raised		\$	11,023,570
Net Reductions of Real Estate - Protests and Recommendations		\$	(164,042,570)

STATEMENT OF ASSESSED VALUATIONS OF POLK COUNTY  
As of July 1, 2008

Real Property		\$ 29,869,657,490
New Construction Added January 1, 2008		\$ 773,619,396
Revaluation		\$ 190,926,060
Property Returned to Taxation		\$ 19,739,200
Total Real Property		<u>\$ 30,853,942,146</u>
Less:		
Demolitions	\$ 8,334,274	
Revaluations	\$ 20,292,322	
Board of Review Adjustments (R.E. Only)	\$ 40,366,260	
New Claims for Tax Exempt and Non-Taxable	\$ 17,917,210	
Court Decrees & Corrections	\$ 32,330,390	\$ 119,240,456
Net Real Property		<u>\$ 30,734,701,690</u>
Railroad and Utility Property*		
Assessed by Department of Revenue		\$ 1,103,493,465
Full Value of Taxable Real Property		\$ 31,838,195,155
Less: Urban Revitalization, Industrial Exemptions, Pollution Control and Forest & Fruit Tree Exemptions		\$ 996,210,070
Military Exemptions - Estimated		<u>\$ 39,000,000</u>
ADJUSTED VALUE OF NET TAXABLE REAL PROPERTY		\$ 30,802,985,085
*****		
Money and Credits - Credit Unions (5 mills)		\$ 28,200,776

\* Railroad and Utility Property values, assessed by the Department of Revenue and Finance, are the latest figures available.



**ABSTRACT OF 2008  
POLK COUNTY ASSESSMENT  
AS OF JULY 1, 2008**

**REAL PROPERTY**

Includes over 150,000 Parcels of Taxable Property

100% Value

	<b>TOWNSHIPS</b>	<b>CITIES</b>
Agricultural Lands	\$ 124,301,540	\$ 22,496,220
Residential (includes residences on ag property)	\$ 19,814,547,570	\$ 1,948,509,760
Commercial Properties	\$ 376,431,550	\$ 8,012,795,760
Industrial Properties	\$ 59,152,040	\$ 376,467,250
	\$ 20,374,432,700	\$ 10,360,268,990
Total Taxable Real Estate *		

**MONEY & CREDITS (100%)**

Credit Unions (5 mills)	\$ 1,920,420	\$ 26,280,347
Finance Companies (5 mills)		
	\$ 1,920,420	\$ 26,280,347

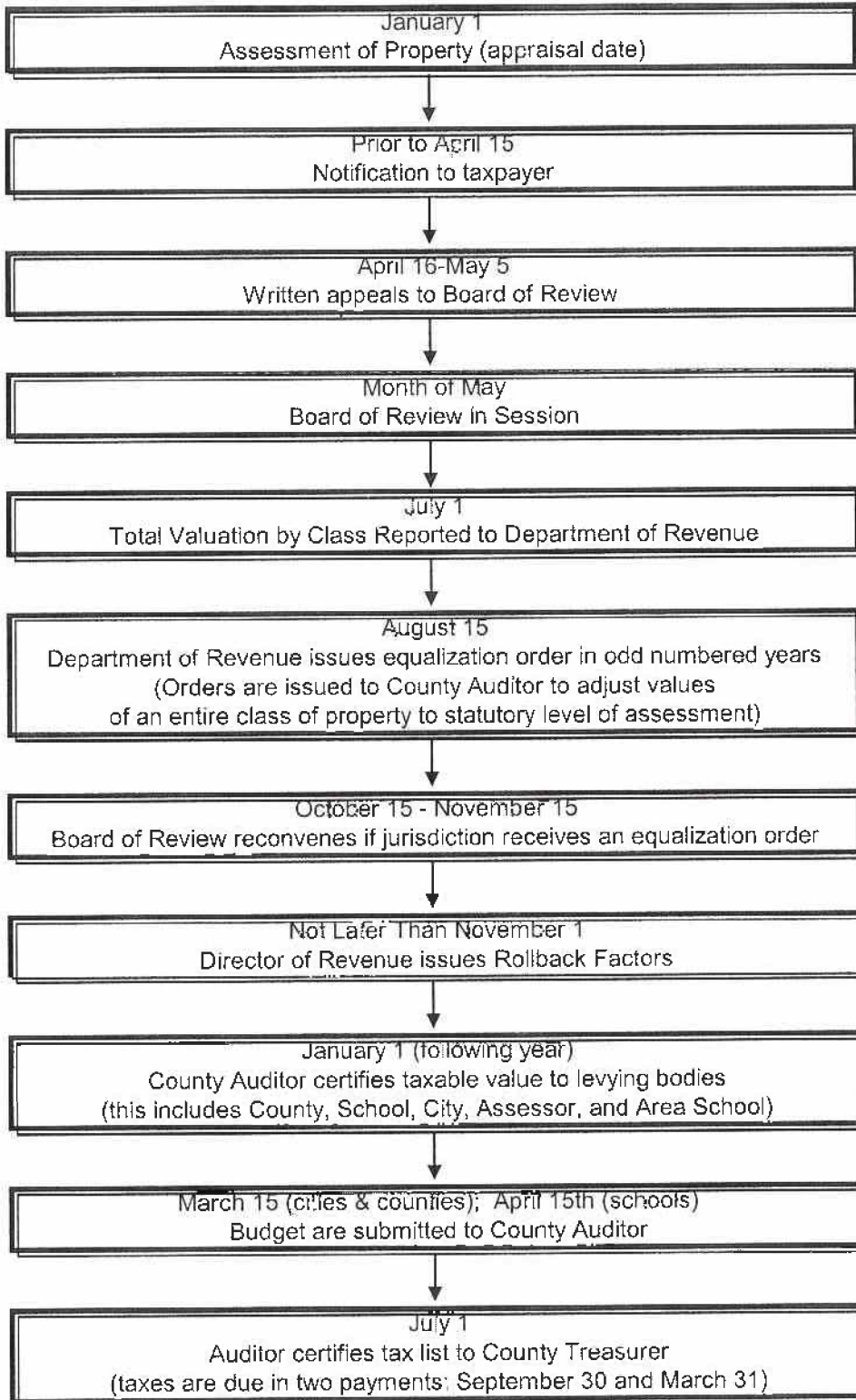
**IMPORTANT NOTE:**

Due to the statewide 4% maximum allowable increase in real estate, there will be a rollback of values if the state increase is great enough to warrant a rollback. The amount of the rollback will be decided by the Department of Revenue in November.

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\* The value does not include utility property assessed by the Department of Revenue .

## PROPERTY TAX TIMELINE



## SURVEY OF NEW HOMES BUILT IN POLK COUNTY

CITIES	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Alleman			7	4	0	11	4	0	0	0	1	2	1	1
Altoona			117	119	83	166	88	164	196	218	354	277	186	120
Ankeny			267	348	475	518	414	652	751	972	1068	1345	681	521
Bondurant			20	13	20	24	27	33	24	14	78	99	67	105
Carlisle			0	0	0	2	0	0	0	0	0	0	0	0
Clive			71	69	37	74	44	45	30	16	35	11	7	2
Des Moines	197	175	150	209	271	381	344	390	520	526	665	520	296	282
Elkhart			0	0	1	1	1	0	0	25	21	29	25	5
Granger											16	33	3	5
Grimes			39	38	71	69	72	60	111	83	98	217	299	248
Johnston			181	188	251	381	285	331	276	329	390	386	290	165
Mitchelville			2	1	5	9	5	3	6	0	3	3	4	2
Pleasant Hill			77	66	72	116	93	116	118	160	118	165	198	114
Polk City			26	29	23	47	30	20	41	80	60	42	45	33
Runnells			0	0	1	2	3	3	12	4	6	4	8	0
Sheldahl			0	1	1	0	0	0	1	0	0	1	1	0
Urbandale			236	193	243	278	262	312	332	292	266	117	120	81
West Des Moines			233	267	460	500	343	224	140	121	120	35	54	49
Windsor Heights			1	0	0	0	0	1	0	1	1	1	1	8

TOWNSHIPS	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Allen				2	1	3	0	0	1	0	0	0	0	0
Beaver				3	1	6	5	4	9	14	9	14	13	10
Bloomfield				0	0	2	0	0	0	0	0	0	0	0
Camp				21	22	15	9	17	18	19	14	28	21	9
Clay				8	10	14	6	16	8	13	9	11	7	2
Crocker				27	79	81	70	43	23	26	21	31	17	13
Delaware				11	11	18	14	8	7	13	6	10	7	2
Douglas				8	12	15	5	3	5	5	4	2	3	0
Elkhart				2	2	7	8	10	9	25	19	14	15	10
Four Mile				12	19	17	13	14	21	23	13	17	8	9
Franklin				15	14	20	14	26	12	22	26	14	9	7
Jefferson				20	37	47	37	50	26	31	31	34	20	14
Lincoln				0	2	2	2	3	4	2	3	2	1	1
Madison				1	0	2	2	1	1	1	1	0	0	0
Saylor				28	24	13	9	10	34	37	23	16	30	21
Union				2	3	2	1	1	7	5	4	2	1	1
Walnut				0	0	0	0	0	0	0	0	0	0	0
Washington				2	5	1	4	2	3	0	6	3	2	0
Webster				1	1	2	3	2	1	1	0	2	1	0

**MISCELLANEOUS INFORMATION AND STATISTICS  
POLK COUNTY**

New Building Permits Processed	8,609
Divisions of Existing Property (As of 09/08/2008 )	610
New Plats (As of 09/08/2008 )	56
New Homestead Tax Credits 2007/2008	6,048
New Military Exemptions 2007/2008	725

*Classes and Numbers of Properties Assessed:*

Agricultural Parcels (Property used for Agricultural Purposes)	5742
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Forest & Fruit Tree Reservations (Acres)	6,429
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Vacant Taxable Parcels	Agricultural	4,576
	Residential	13,661
	Commercial	1,939
	Industrial	421

Improved Taxable Parcels	Agricultural	1,166
	Residential	135,033
	Commercial	8,489
	Industrial	318

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<b>Average 100% Assessment of Residential Property</b>	<b>\$</b>	<b>158,941</b>
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**EXEMPT PROPERTY AS OF JULY 2008  
POLK COUNTY**

**RELIGIOUS INSTITUTIONS**

Churches & Church Headquarters	\$	508,533,290
Parsonages	\$	16,396,610
Recreation Property, Church Camps, Etc.	\$	102,271,610

**LITERARY SOCIETIES**

Community Play House	\$	14,133,660
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**LOW RENT HOUSING**

Dwellings & Apartments	\$	29,646,840
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**VETERANS ORGANIZATIONS**

\$ 2,399,710

**CHARITABLE & BENEVOLENT SOCIETIES**

Hospitals	\$	372,832,730
Fraternal Organizations	\$	14,482,190
Agricultural Societies	\$	7,486,450
Retirement & Nursing Homes	\$	180,757,670
Others (Y.M.C.A., Y.W.C.A., etc.)	\$	241,564,950

**EDUCATIONAL INSTITUTIONS & CHURCH SCHOOLS**

\$ 304,212,520

**POLLUTION CONTROL (Industrial M & E and Bldgs.)**

\$ 4,477,360

**URBAN REVITALIZATION TAX EXEMPTION**

\$ 931,283,790

**INDUSTRIAL PARTIAL EXEMPTION**

\$ 28,939,710

**NATURAL CONSERVATION**

\$ 666,440

**FOREST & FRUIT TREE PRESERVATION (6429.054 Acres)**

\$ 22,718,320

**HISTORICAL**

\$ -

**IMPOUNDMENTS**

\$ 44,020

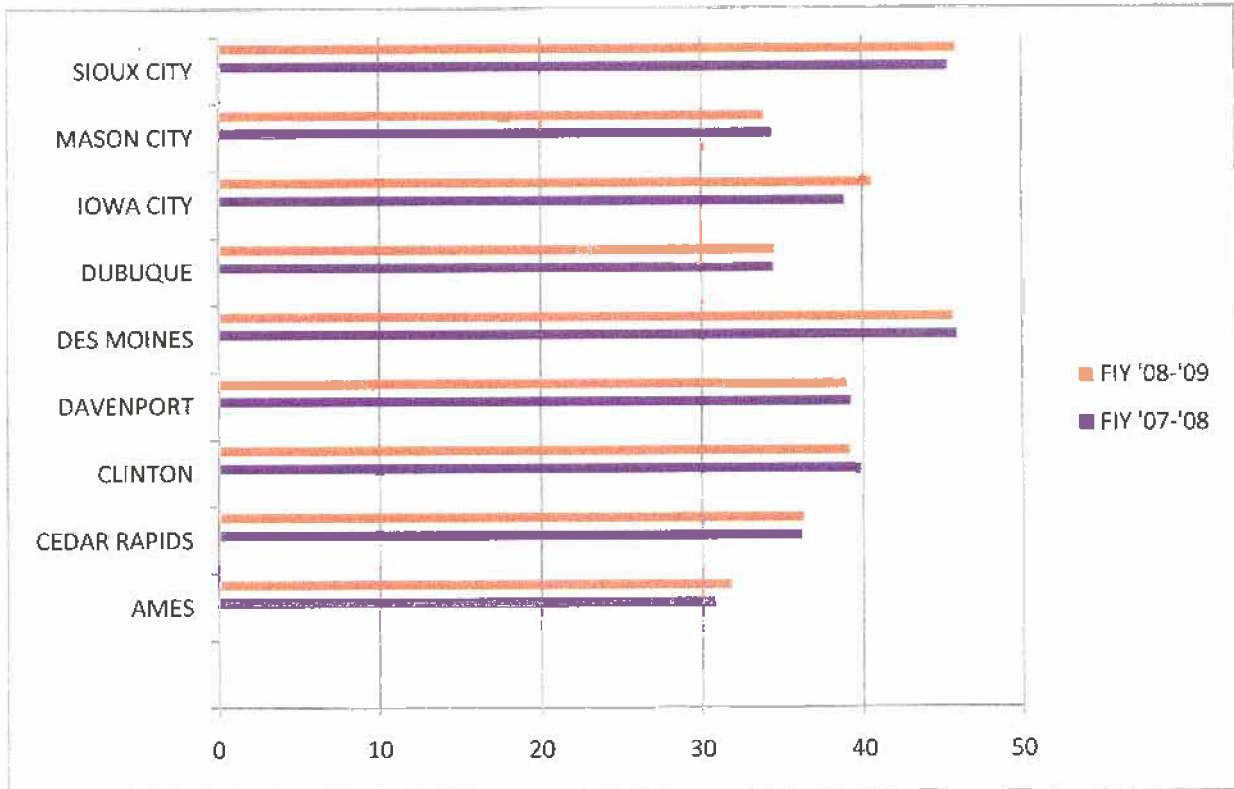
**TOTAL EXEMPT PROPERTY**

\$ 2,782,847,870



**COMPARISON OF TAX RATES PER THOUSAND  
FOR TAXES PAYABLE FISCAL '07-'08 TO '08-'09  
AS COMPILED BY THE POLK COUNTY ASSESSOR'S OFFICE**

<u>JURISDICTION</u>	<u>FIY '07-'08</u>	<u>FIY '08-'09</u>
AMES	30.73685	31.77848
CEDAR RAPIDS	36.14047	36.25611
CLINTON	39.79537	39.11416
DAVENPORT	39.20993	38.95313
DES MOINES	45.89578	45.65841
DUBUQUE	34.39736	34.44676
IOWA CITY	38.83044	40.56747
MASON CITY	34.36274	33.81858
SIOUX CITY	45.34487	45.87394

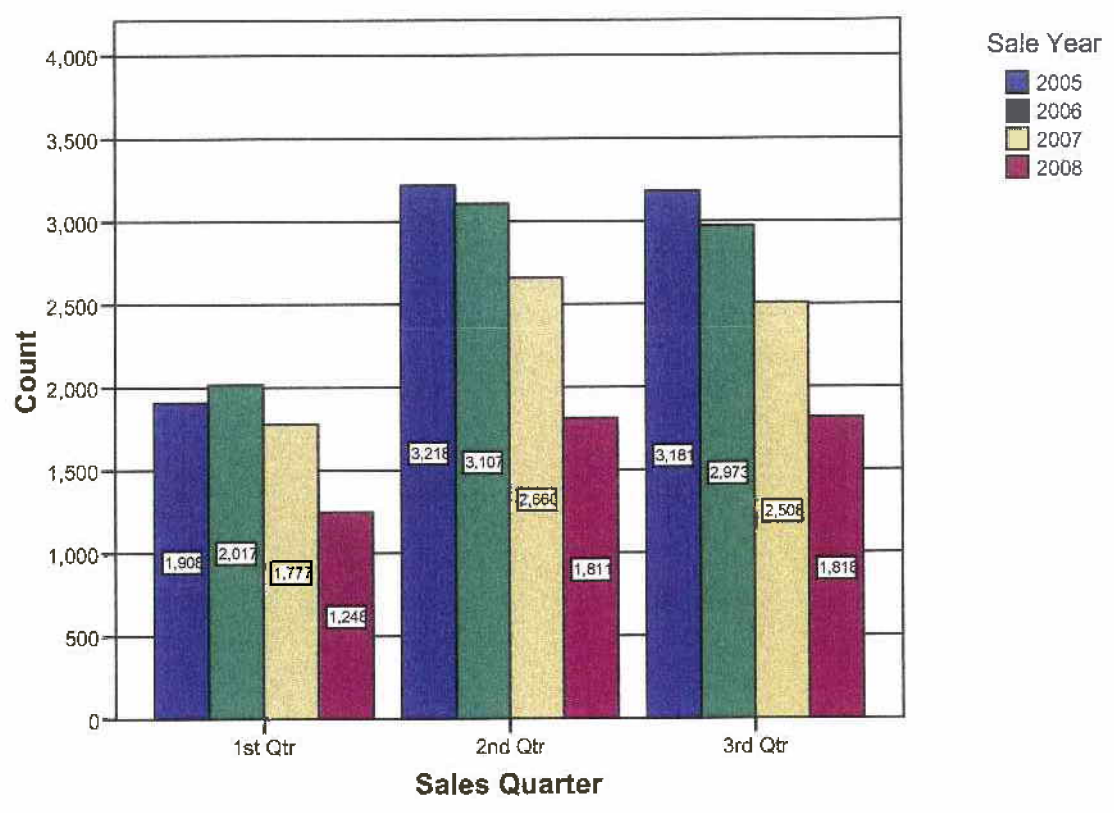


**MILLAGE**

# **Residential Sales Statistics**

## **Polk County**

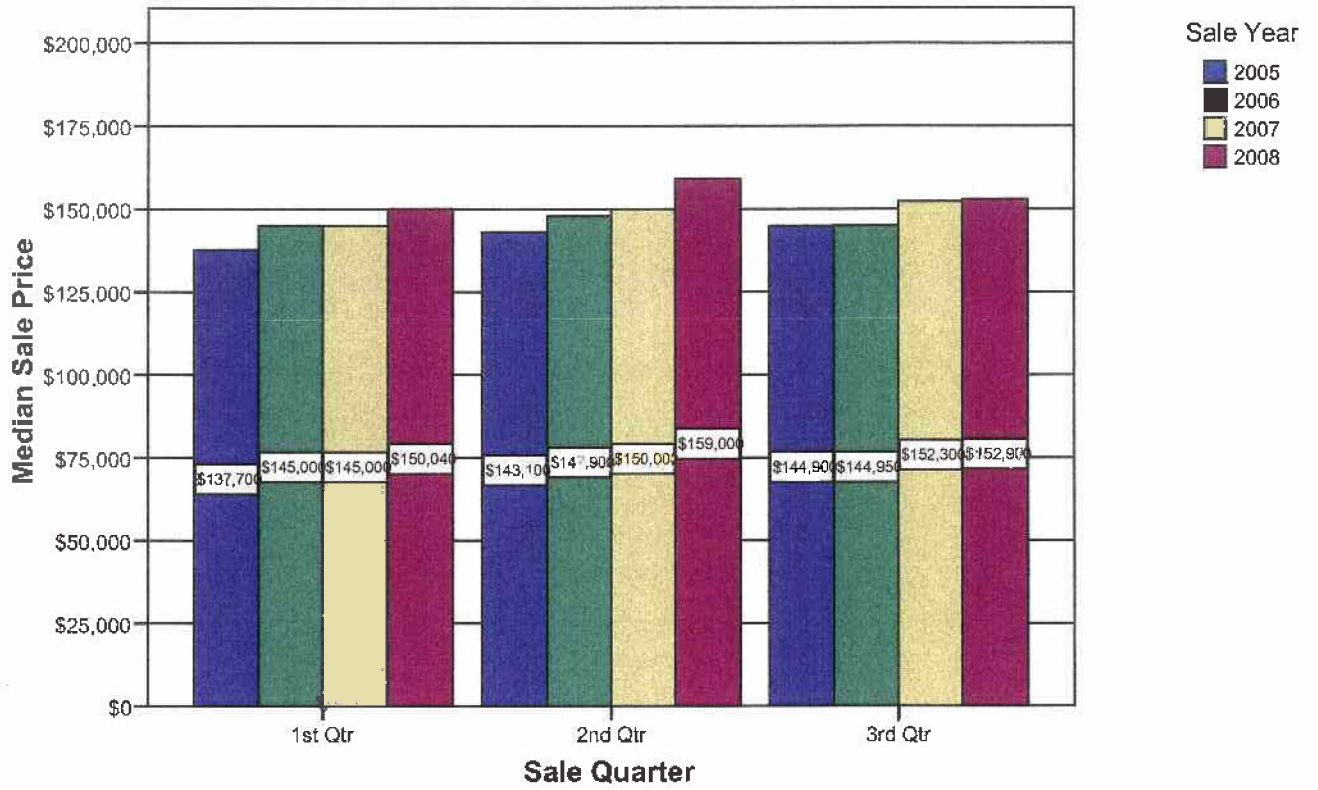
### Number Of Sales By Year and Quarter



### Number of Sales by Year & Quarter

Sale Year	Sales Quarter		
	1st Qtr	2nd Qtr	3rd Qtr
2005	1,908	3,218	3,181
2006	2,017	3,107	2,973
2007	1,777	2,660	2,508
2008	1,248	1,811	1,818

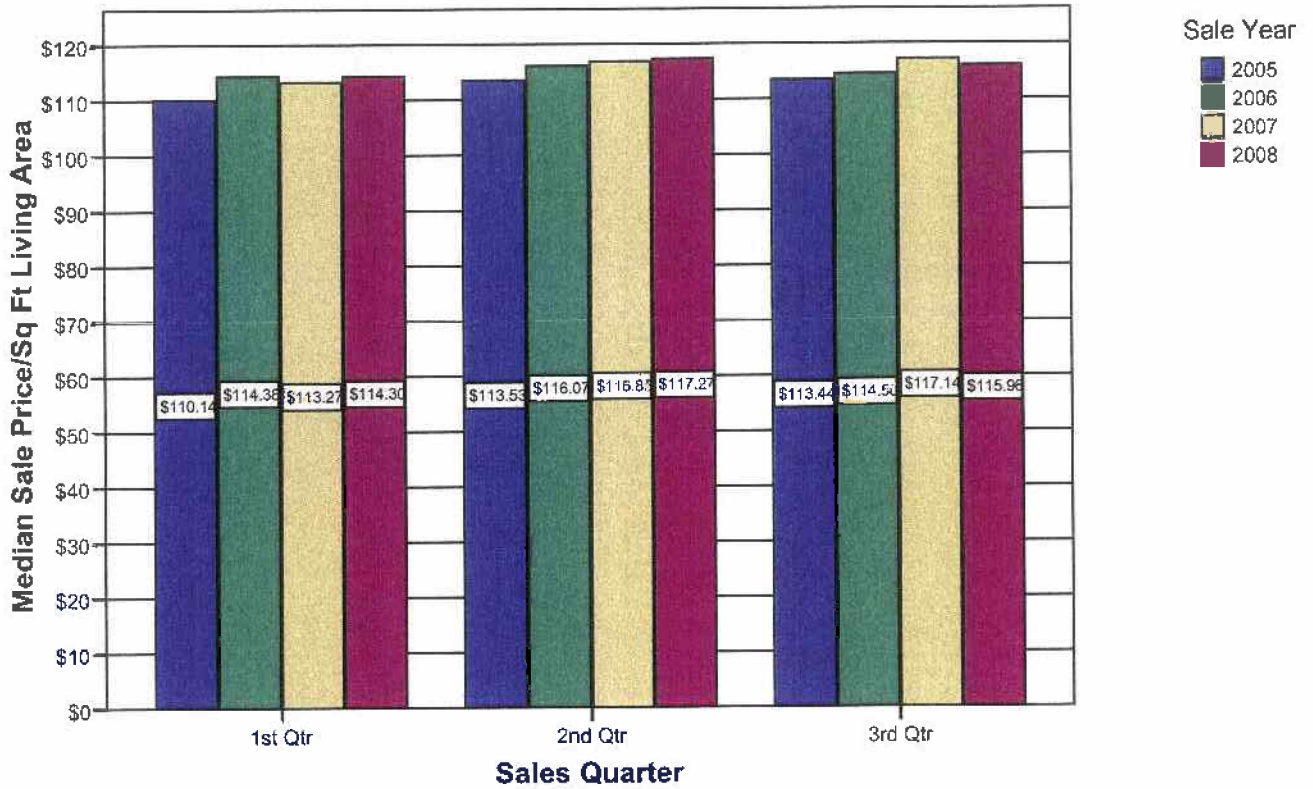
### Median Sale Price By Year and Quarter



### Median Sale Price by Year & Quarter

Sale Year	Sales Quarter		
	1st Qtr	2nd Qtr	3rd Qtr
2005	\$137,700	\$143,100	\$144,900
2006	\$145,000	\$147,900	\$144,950
2007	\$145,000	\$150,000	\$152,300
2008	\$150,040	\$159,000	\$152,900

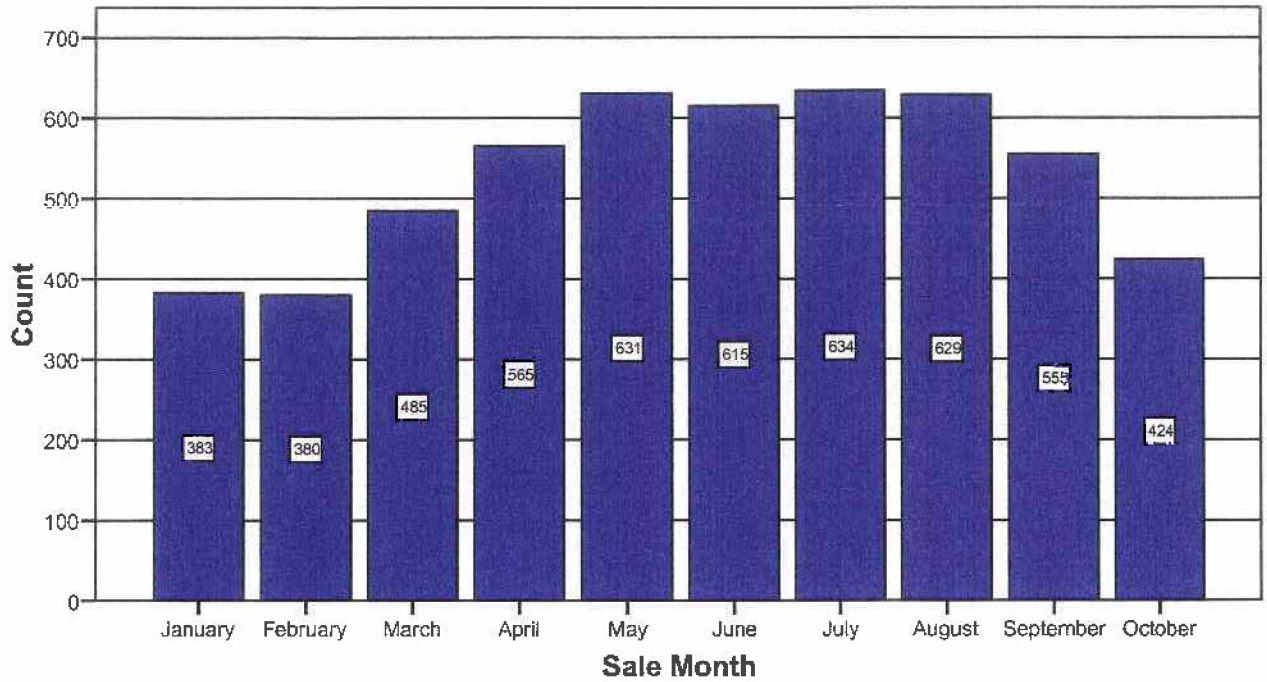
### Median Sale Price/Sq.Ft By Year and Quarter



Median Sale Price/Sq.Ft. by Year & Quarter

Sale Year	Sales Quarter		
	1st Qtr	2nd Qtr	3rd Qtr
2005	\$110.14	\$113.53	\$113.44
2006	\$114.38	\$116.07	\$114.50
2007	\$113.27	\$116.83	\$117.14
2008	\$114.30	\$117.27	\$115.96

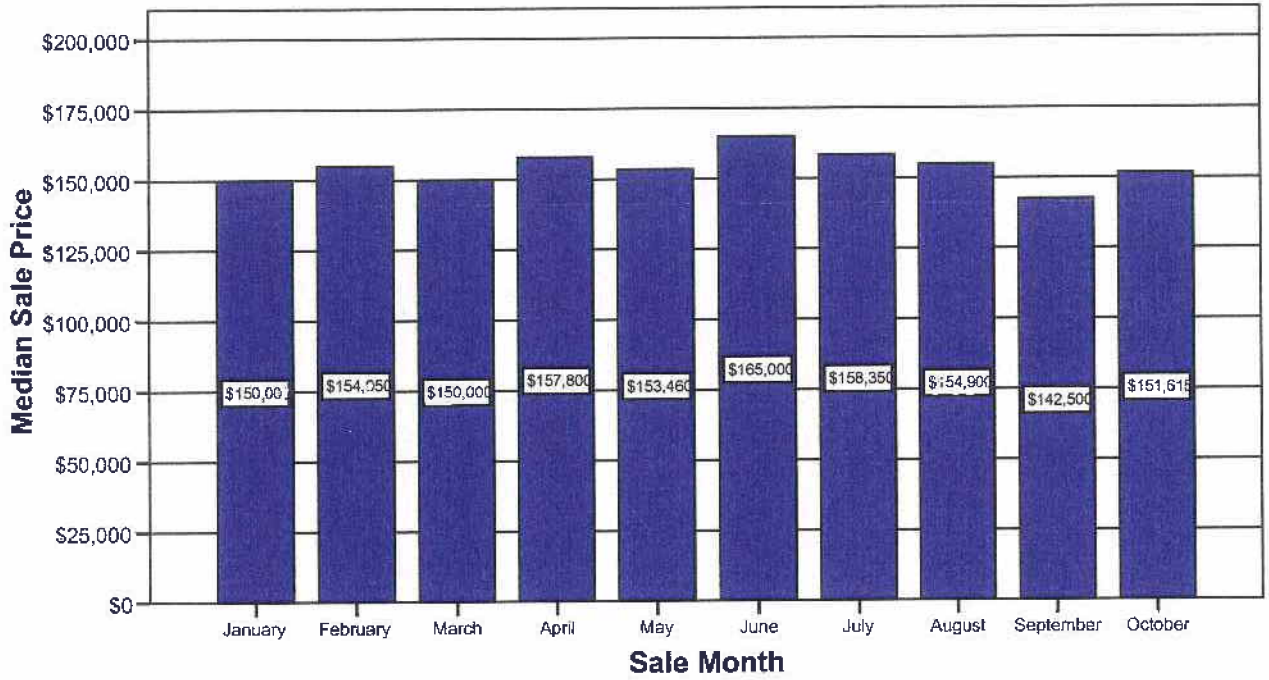


**Number of Sales by Month****Year 2008****Number of Sales by Month - Year 2008**

Sale Month	Number
January	383
February	380
March	485
April	565
May	631
June	615
July	634
August	629
September	555
October	424

### Median Sale Price By Month

Year 2008



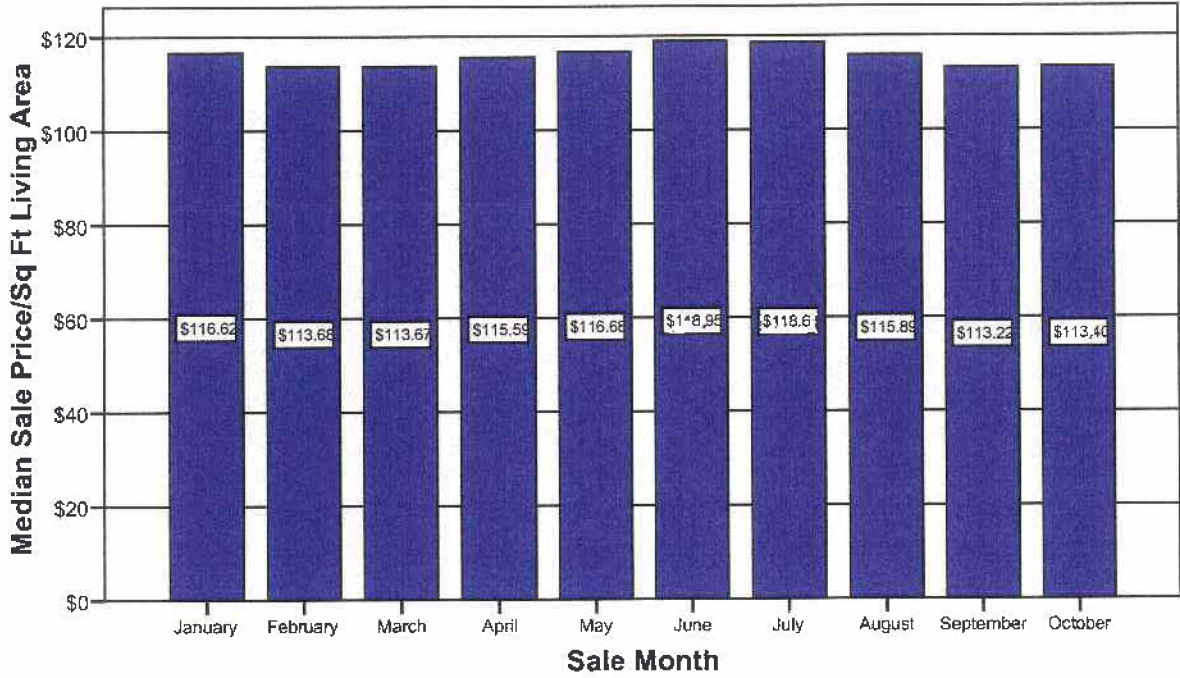
Median Sale Price by Month - Year 2008

Sale Month	Sale Price
January	\$150,000
February	\$154,950
March	\$150,000
April	\$157,800
May	\$153,460
June	\$165,000
July	\$158,350
August	\$154,900
September	\$142,500
October	\$151,615

SS

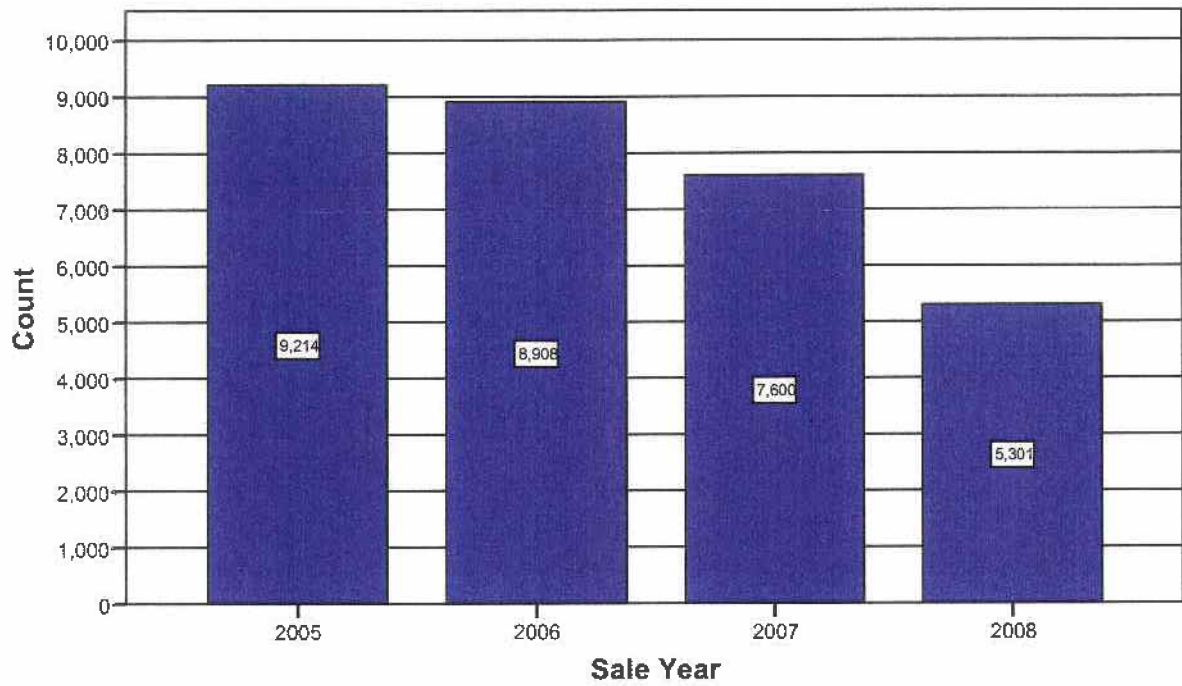
### Median Sale Price/Sq.Ft by Month

Year 2008



Median Sale Price/Sq.Ft. by Month - Year 2008

Sale Month	Sale Price/Sq Ft Living Area
January	\$116.62
February	\$113.68
March	\$113.67
April	\$115.59
May	\$116.68
June	\$118.95
July	\$118.61
August	\$115.89
September	\$113.22
October	\$113.40

**Number of Sales through October****Years 2005 - 2008****Number of Sales through October**

Sale Year	Count
2005	9214
2006	8908
2007	7600
2008	5301

**Sales Ratio Study  
Polk County  
Residential 1 & 2 Family Dwellings  
Year 2008**

Assessors use mass appraisal techniques to estimate the current market value of property in their jurisdictions for property tax purposes. The assessor's estimates of property value govern the distribution of property taxes, a major source of local government revenue. The mass appraisal system must produce accurate and equitable value estimates if the property tax is to be fair. Thus, quality control is paramount. The mainstay quality control technique used by assessors is the sales ratio study, in which appraised (assessed) values are compared to market values (sales prices). A sales ratio is the ratio between a parcel's assessed value and its estimated market value as represented by an open-market, arm's-length sale.

The two major aspects of measuring appraisal accuracy in a sales ratio study are appraisal level and appraisal uniformity. Appraisal level refers to the overall, or typical, ratio at which properties are appraised. Appraisal uniformity refers to the fair and equitable treatment of individual properties.

### **Measures of Appraisal Level**

Measures of central tendency are used to estimate the overall appraisal level at which property is assessed in one convenient statistic. There are three measures of central tendency used in this ratio study: the mean, the median, and the weighted mean.

The *mean ratio* is the common average obtained by adding all the ratios and dividing by the number of ratios. The *median ratio* is the middle ratio when they are arrayed from lowest to highest. The *weighted mean ratio* is the sum of the assessments divided by the sum of the sales prices. It is so called because it weights each ratio by its sale price. The median is less affected by extreme ratios than the other measures of central tendency. Because of this, the median is the generally preferred measure of central tendency for direct equalization, monitoring appraisal performance, determining reappraisal priorities, or evaluating the need for a reappraisal.

Confidence intervals can be calculated for the three measures of central tendency, which help conclude whether required assessment level standards have been violated. For example, a 95 percent confidence interval would suggest that one can be 95 percent confident that the true median appraisal level is between the two interval values.

Iowa law requires that the appraisal level for assessments of residential properties be at 100 percent for each assessor jurisdiction. If the actual level deviates from the legal level by more than five percent, the value estimates being studied would need to be updated. In Iowa, this occurs every odd numbered year.

### **Measures of Appraisal Uniformity**

Measures of dispersion are used to measure appraisal uniformity. The two most useful measures of appraisal uniformity are the coefficient of dispersion (COD) and the price-related differential (PRD).



The *coefficient of dispersion* (COD), the most common measure of equity in mass appraisal, expresses the average absolute deviation of individual ratios from the median ratio as a percentage. A COD of 10.0, for example, means that properties are, on average, appraised within 10.0 percent of the median assessment level.

The *price-related differential* (PRD) provides an index of price-related bias, indicating whether low- and high-value properties are assessed at the same level. It is the ratio of the mean ratio to the weighted mean ratio. PRDs that exceed 1.03 suggest that high-value properties are relatively under-valued. PRDs under 0.98 indicate low-value properties are relatively under-valued.

### **Sales Ratio Performance Standards**

The Standard on Ratio Studies, published in 2007 by the International Association of Assessing Officers (IAAO), has suggested sales ratio performance standards for jurisdictions in which current market value is the legal basis for assessment. In general, when these standards are not met, reappraisal or other corrective measures should be taken. Following are the sales ratio performance standards in the publication mentioned above for single-family residential properties:

<u>Type</u>	<u>Measure of Central</u>		
	<u>Tendency</u>	<u>COD</u>	<u>PRD</u>
Newer, more homogenous areas	0.90-1.10	5.0 to 10.0	0.98-1.03
Older, heterogeneous areas	0.90-1.10	5.0 to 15.0	0.98-1.03
Rural residential and seasonal	0.90-1.10	5.0 to 20.0	0.98-1.03

### **Polk County Sales Ratio Study (1 & 2 Family Dwellings)**

In Polk County, through October of 2008 (November not fully reported), there were 4,252 residential sales of 1 & 2 family dwellings that were considered open-market, arm's-length sales. These sales were used to calculate the statistics described above for this study.

A 1 percent trim was also performed on the sales, which disregards the lowest 1 percent of the sales ratios and the highest 1 percent of the sales ratios. Trimming the sales can be useful in mass appraisal, where extreme values can mask the underlying distribution of the data. After doing a 1 percent trim, there were 4,168 sales that were used to calculate the sales ratio statistics.

On the following pages are charts that have the results of the sales ratio study for Polk County using residential sales of 1 & 2 family dwellings occurring through October of 2008 (November not fully reported). There are also some graphs that show trends and patterns of the residential real estate market in Polk County.

## Ratio Statistics for 1 &amp; 2 Family Dwellings - Based on 4,252 Sales

Mean			<b>1.010</b>
	95% Confidence Interval for Mean	Lower Bound	1.002
		Upper Bound	1.018
Median			<b>.978</b>
	95% Confidence Interval for Median	Lower Bound	.975
		Upper Bound	.982
		Actual Coverage	95.2%
Weighted Mean			<b>.979</b>
	95% Confidence Interval for Weighted Mean	Lower Bound	.975
		Upper Bound	.984
Price Related Differential			<b>1.031</b>
Coefficient of Dispersion			<b>12.2%</b>

## Ratio Statistics for 1 &amp; 2 Family Dwellings after 1% Trim - Based on 4,168 Sales

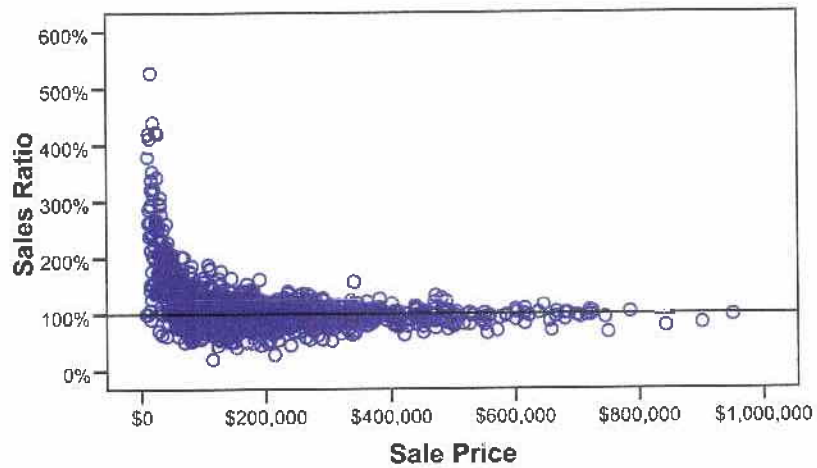
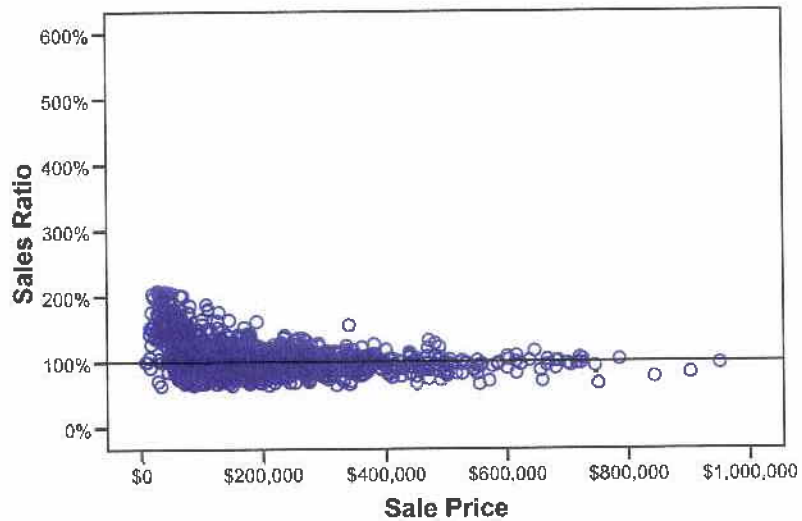
Mean			<b>.995</b>
	95% Confidence Interval for Mean	Lower Bound	.990
		Upper Bound	1.000
Median			<b>.978</b>
	95% Confidence Interval for Median	Lower Bound	.975
		Upper Bound	.982
		Actual Coverage	95.1%
Weighted Mean			<b>.981</b>
	95% Confidence Interval for Weighted Mean	Lower Bound	.977
		Upper Bound	.985
Price Related Differential			<b>1.014</b>
Coefficient of Dispersion			<b>9.9%</b>

The above two charts show that the current median ratio for Polk County is .978 or 97.8%. This meets the IAAO's suggested performance standard and is within 5% of the legal level in Iowa (100%), but not at 100%. Thus, while assessed values are not going up much (if any), they're not going down either for 2009. Watching the market during the rest of 2008 will give us an indication of where assessments should be for 2009.

The COD after a 1% trim is 9.9%, which means that, on average, residential assessments in Polk County are within 9.9% of the median assessment level (97.8%). The PRD also meets the IAAO's suggested performance standard and indicates that low- and high-valued properties are relatively being assessed at the same level.

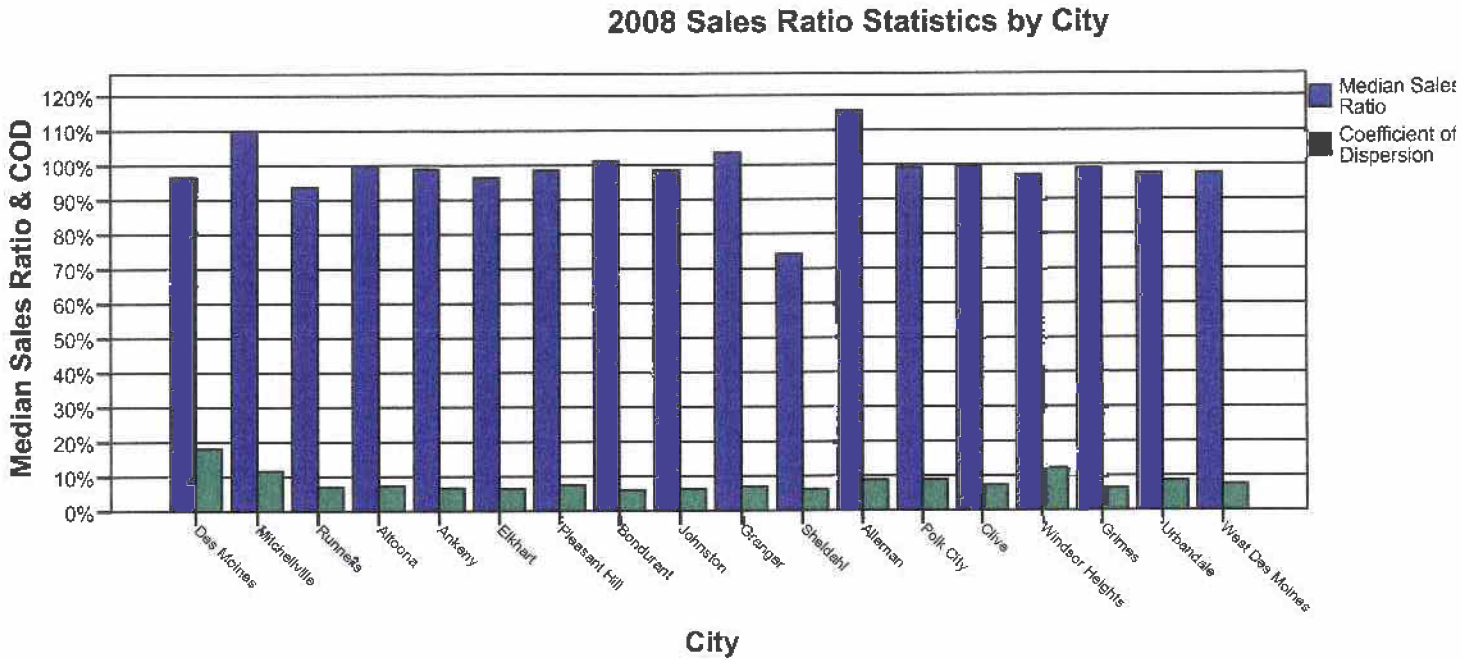
**Plot of Sales Ratios with Sales Price**

Year 2008

**Plot of Sales Ratio with Sale Price - 1% Trim**

The above charts show the distribution of the sales ratios against their sale prices. The line on the sales ratio axis at 100% represents the legal assessment level. These charts support the PRD statistic above (assessment uniformity), which indicates that low- and high-valued properties are relatively assessed at the same general level.

The chart below shows the median ratio and COD for each city in Polk County. One can see why different cities have different percent adjustments in reassessment years.



By plotting the reciprocals of the sales ratios (sale price/assessment) over time, one can visualize any inflation/deflation trends in the market. In the chart below, one can see that the market through 2007-2008 is well below the previous assessment cycles from 2001 to 2006 and 2008 is lower than 2007 and has been relatively flat throughout the year.

### Median Sales Ratio Reciprocal by Month

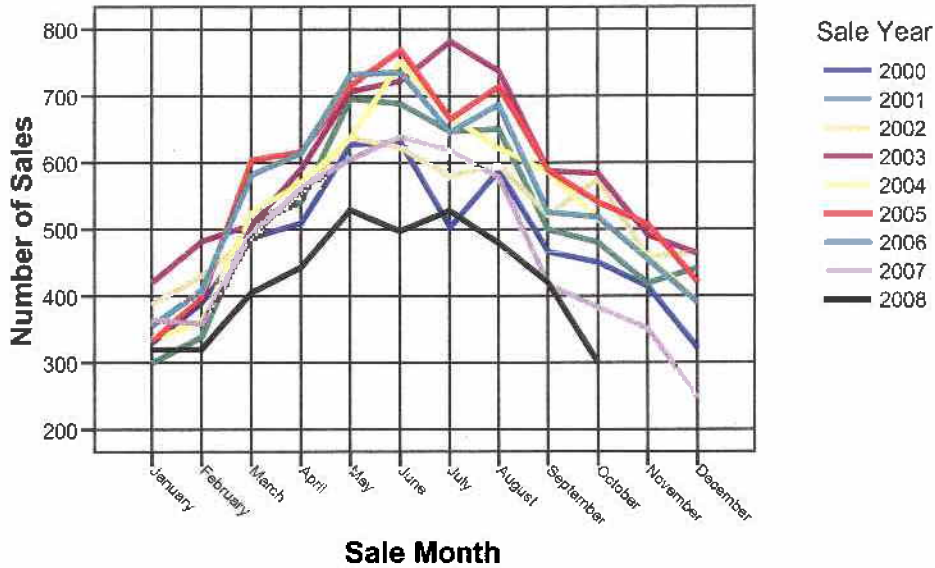






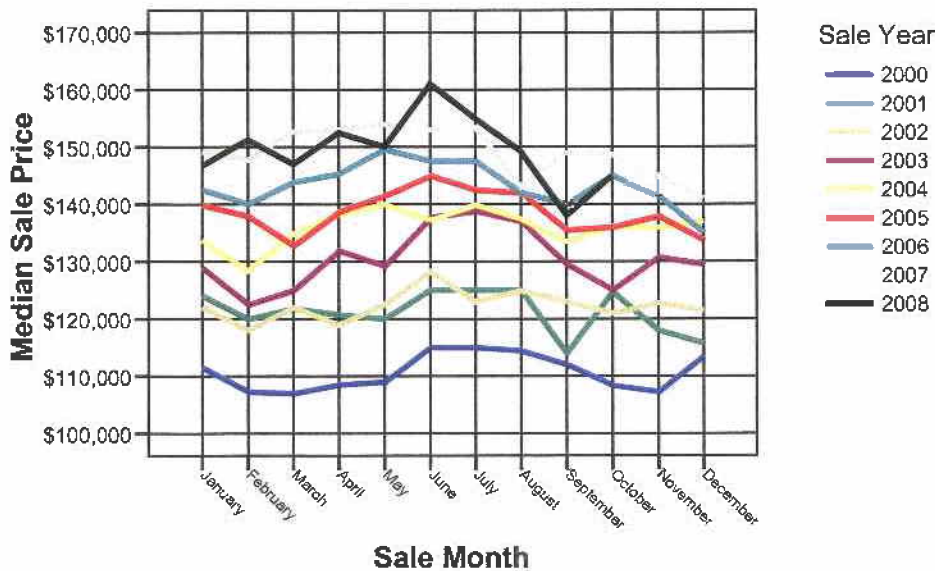
The following chart shows that market activity increases during the spring/summer months and decreases during the fall/winter months. This pattern is pretty consistent from year-to-year. The spring/summer months are a good time to be selling a home.

**Number of Sales by Month**



The residential real estate market in Polk County has been increasing during the last seven years. The median sale price in 2000 was roughly \$110,000, while in 2008 it is roughly \$150,000. The seasonal patterns are also apparent here.

**Median Sale Price by Month**



The median sale price per square foot of living area has been increasing from 2000 to 2007, which points to an upward movement in the residential real estate market. The median sale price/sq. ft. in 2000 was roughly \$90, while in 2008 it is roughly \$115, down from an average of about \$117 in 2007. We will continue to follow this trend throughout 2008 and into 2009.

**Median Sale Price/Sq.Ft. by Month**

