

# Retail Trade Analysis Fiscal Year 2019

## Crawford County

Iowa State University  
Department of Economics

### Overview

This report examines local retail sales and related economic trends using a variety of historical and peer-based performance measures.

The retail measures are based on sales of goods and services that are subject to Iowa's statewide sales tax, as reported in the Iowa Department of Revenue Annual Sales and Use Tax Report.

Retail sales data have been adjusted for inflation and are stated in Fiscal Year 2019 dollar equivalents, unless otherwise noted. The 2019 fiscal year began July 1, 2018, and ended June 30, 2019.

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Table 1. Crawford County Key Retail Indicators

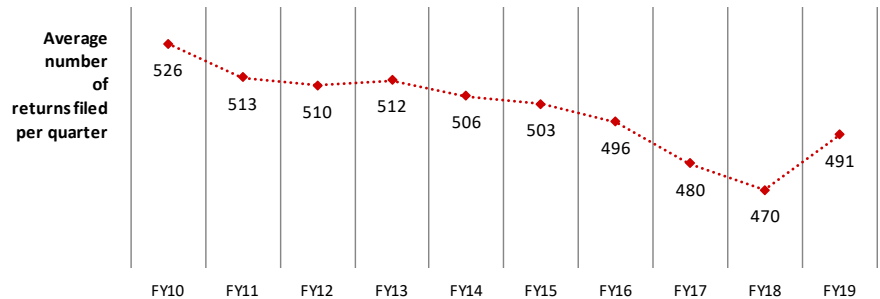
	FY2018	FY2019	% Change
Real total taxable sales (\$)	148,813,338	157,113,390	5.6% ▲
Number of reporting firms (annualized)	470	491	4.5% ▲
Population	17,083	16,955	-0.7% ►
Average sales per capita (\$)	8,711	9,266	6.4% ▲
Average sales per firm (\$)	316,456	319,987	1.1% ▲

*No distinctions are made among residents of households, educational institutions, nursing homes, or other group quarters in the calculation of per capita sales and related indicators.*

# 10-Year Summary of Taxable Retail Sales Statistics

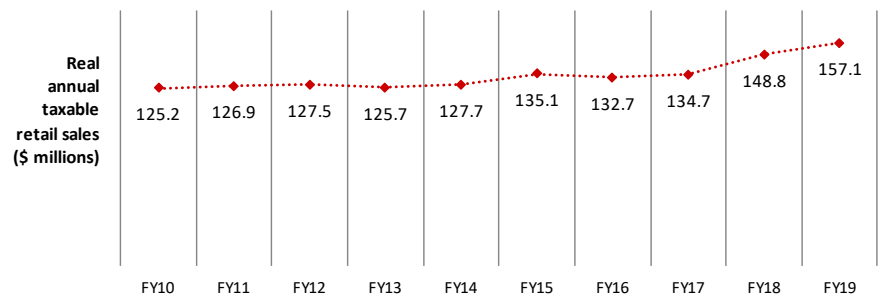
**Figure 1** shows the average number of business establishments filing sales tax returns during the year, serving as a rough estimate for the number of local retail establishments.

**Figure 1. Number of Reporting Establishments**



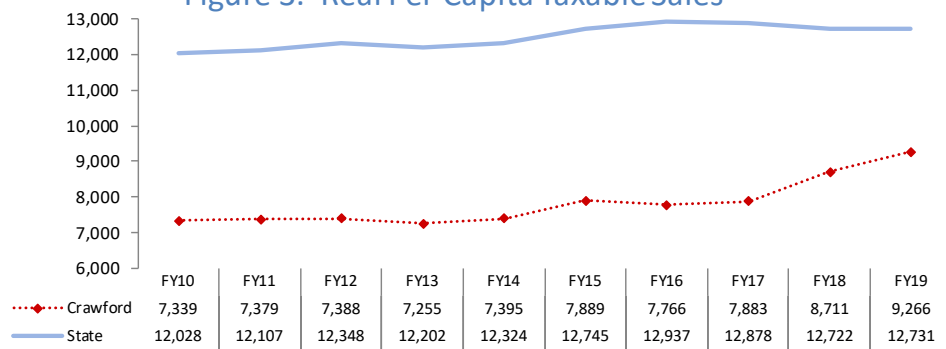
**Figure 2** shows the total real, or inflation-adjusted, value of taxable retail sales reported by local businesses.

**Figure 2. Real Total Taxable Sales**



**Figure 3** compares local retail sales on a per capita basis to the statewide per capita average.

**Figure 3. Real Per Capita Taxable Sales**



# Historical Trends in Taxable Retail Sales

Table 2. Historical Statistics for Crawford County:

Fiscal Year	Reporting Firms	Total Taxable Sales (\$)		Real Average Sales (\$)		Statewide Real Average (\$)	
		Nominal	Real	Per Firm	Per Capita	Per Firm	Per Capita
1976	590	41,623,348	154,823,570	262,302	8,221	389,965	11,069
1977	612	46,803,135	164,595,654	268,837	8,646	402,043	11,721
1978	634	51,350,041	169,348,138	267,216	8,829	396,235	11,985
1979	644	60,242,323	184,398,263	286,222	9,584	401,923	12,523
1980	671	69,010,780	191,564,475	285,704	10,024	394,146	12,485
1981	676	67,274,372	169,431,276	250,545	8,960	350,472	11,327
1982	667	66,428,294	156,369,297	234,525	8,290	336,721	10,893
1983	665	70,762,957	158,861,505	238,889	8,438	327,385	10,769
1984	669	70,421,277	151,973,033	227,249	8,094	320,763	10,683
1985	660	69,823,287	145,573,188	220,733	7,854	317,278	10,660
1986	664	68,859,191	139,356,157	209,795	7,726	311,144	10,648
1987	656	72,794,062	144,202,608	219,737	8,157	329,120	11,110
1988	647	72,429,665	138,422,359	213,945	7,889	330,896	11,178
1989	658	72,298,644	132,327,004	201,028	7,662	336,241	11,275
1990	650	73,755,559	129,759,652	199,707	7,679	340,333	11,379
1991	636	77,120,372	130,048,910	204,399	7,770	341,663	11,308
1992	629	82,667,035	135,702,621	215,829	8,094	342,012	11,402
1993	651	84,867,774	135,726,429	208,569	8,109	342,314	11,543
1994	643	86,676,660	135,663,523	210,985	8,124	349,574	11,793
1995	629	89,846,526	137,569,863	218,625	8,219	356,788	12,029
1996	612	91,071,833	136,715,724	223,574	8,153	357,708	12,294
1997	603	94,296,051	138,607,917	229,959	8,241	376,016	12,495
1998	609	93,505,253	135,907,198	223,348	8,050	378,426	12,710
1999	596	96,727,734	139,208,995	233,572	8,234	404,875	13,239
2000	582	98,775,409	139,197,258	239,068	8,223	412,564	13,298
2001	584	98,155,048	135,060,168	231,168	7,967	413,506	13,339
2002	575	100,960,262	137,242,674	238,579	8,087	415,051	13,184
2003	528	97,521,279	130,115,500	246,431	7,669	433,650	13,035
2004	516	98,254,447	128,460,427	249,196	7,580	441,149	12,906
2005	494	98,749,867	125,778,596	254,484	7,429	439,335	12,830
2006	480	101,172,344	124,996,204	260,273	7,399	450,918	12,925
2007	516	103,353,480	124,770,503	241,686	7,383	442,237	12,773
2008	520	106,609,531	124,888,539	240,055	7,387	442,954	12,887
2009	535	108,070,504	125,169,282	233,961	7,401	434,644	12,850
2010	526	109,300,240	125,184,844	238,107	7,339	417,088	12,028
2011	513	112,746,064	126,878,792	247,568	7,379	432,600	12,107
2012	510	116,127,797	127,508,989	250,140	7,388	441,036	12,348
2013	512	116,243,042	125,724,424	245,556	7,255	435,402	12,202
2014	506	119,741,557	127,664,282	252,301	7,395	452,587	12,324
2015	503	127,693,647	135,098,542	268,853	7,889	471,222	12,745
2016	496	126,100,940	132,738,970	267,619	7,766	478,872	12,937
2017	480	129,926,008	134,714,016	280,508	7,883	478,871	12,878
2018	470	146,274,517	148,813,338	316,456	8,711	475,534	12,722
2019	491	157,113,390	157,113,390	319,987	9,266	468,399	12,731

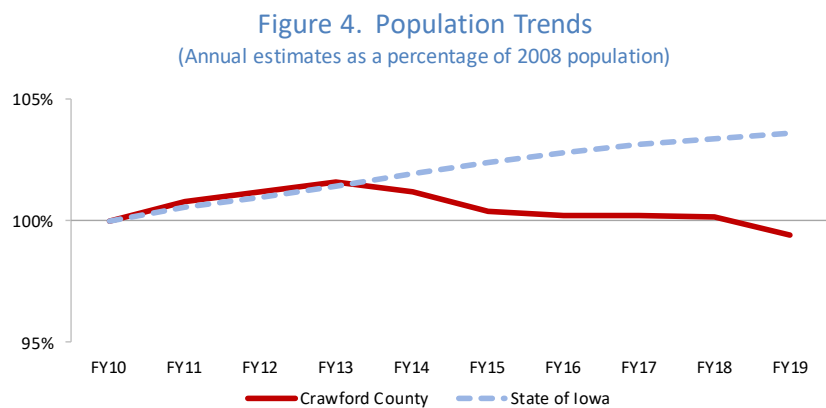
# Local Economic Trends

## Population

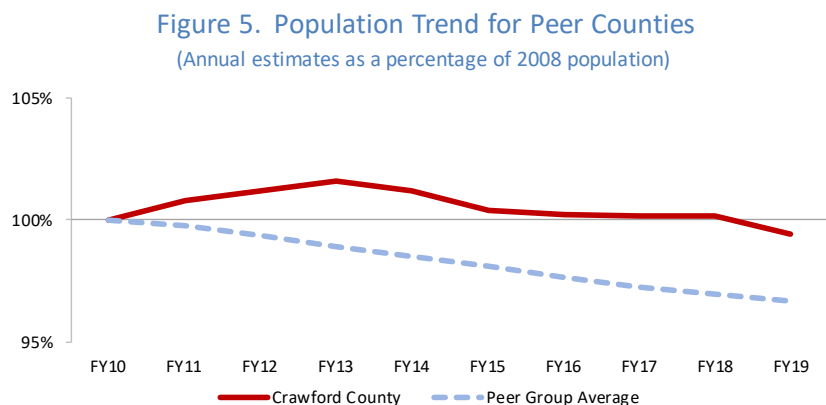
Population change is a key factor influencing local retail sales performance. Population gains or losses from year to year directly impact the number of potential shoppers in the region.

In the longer term, population trends also reflect the region's general economic climate. Population growth or stability suggest a more favorable retail environment than population decline, which may signify erosion in the region's economic vitality.

**Figure 4** shows annual population estimates for the county and state, expressed as percentages of baseline values from ten years ago.



**Figure 5** compares the local population trend to the average experience for similarly-sized counties in Iowa. See Pages 23-24 for a listing of Iowa counties by peer group.



## Local Economic Trends (continued)

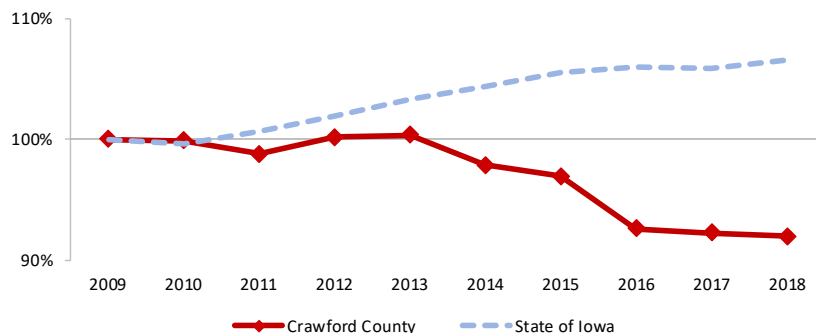
### Employment

Area job growth creates earnings opportunities for current residents and also helps to attract new residents to the region. Conversely, lagging employment growth rates may indicate a decline in the region's competitive strength. Figure 6 shows recent county and state employment trends

Rising or persistently high levels of unemployment may contribute to household economic stress within the region and may ultimately reduce aggregate household spending levels. Figure 7 illustrates recent unemployment rates for the county and state.

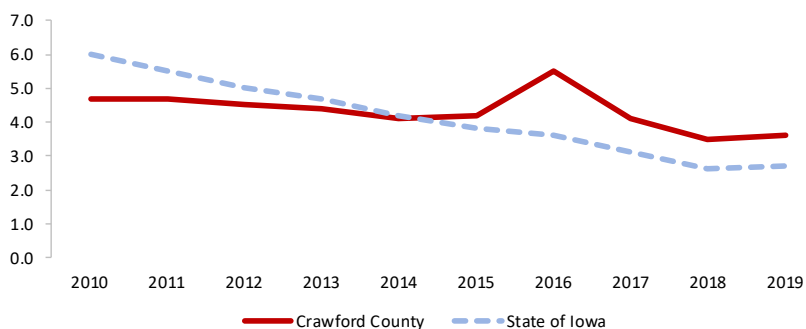
**Figure 6** shows the 10-year trend in county wage and salary employment on a place of work basis. Each year's employment, which counts full-time and part-time jobs equally, is expressed as a percentage of baseline year employment.

**Figure 6. Employment Trends**  
(Annual employment as a percentage of 2009 employment)



**Figure 7** shows recent county and statewide unemployment rate trends. The unemployment rate is defined as the percentage of the resident labor force that is unemployed but actively seeking work.

**Figure 7. Unemployment Rate**  
(Unemployed percentage of the labor force)



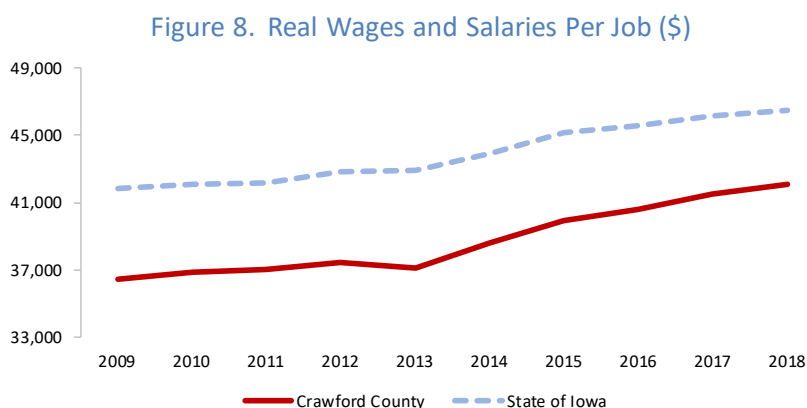
## Local Economic Trends (continued)

### Personal Income

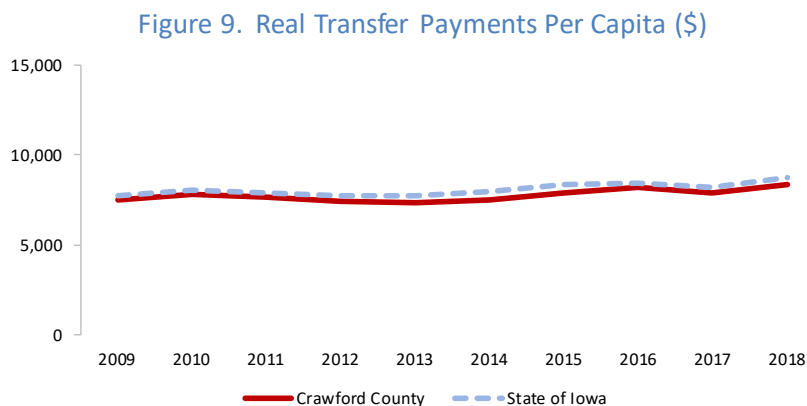
Local income levels influence the amounts and types of retail goods and services that area residents demand. Wages and salaries typically comprise the largest portion of local personal income. Other major sources include proprietors' income, investment income, and transfer payments from governments.

Social Security, food assistance, and other government transfers help to stabilize local income levels. A comparatively high dependence on transfer payments, however, suggests that households with low or fixed incomes comprise a larger than average share of the local customer base.

**Figure 8** compares recent average earnings per wage and salary job in the county and the state. The dollar values have been adjusted for inflation.



**Figure 9** shows average transfer payment receipts by county and state residents. These payments include Social Security, Medicare, Medicaid, unemployment insurance, food assistance, and other income supports.



# Local Economic Trends (continued)

## Income and Age Distributions

Consumer spending behaviors tend to vary by age, income, and other personal characteristics. If the distribution of local residents by income or age deviate strongly from statewide averages, one might expect local spending patterns to differ from the typical spending patterns of Iowa residents.

**Table 3** shows the county's median household income level and estimated poverty rate compared to the state. In counties with a lower median income level, a higher poverty rate, or both, lower-than-average household spending levels may be anticipated locally.

**Table 3. Crawford County Income and Poverty**

Median Household Income (\$)	Crawford	State of Iowa
Estimate	54,828 <	60,071
90% Confidence Interval	49,330 - 60,320	59,230 - 60,920

Poverty Rate (%)	Crawford	State of Iowa
Estimate	12.3 >	11.2
90% Confidence Interval	10.0 - 14.6	10.9 - 11.5

**Table 4** illustrates the percentage distribution of the county's population by age group, relative to the comparable statewide percentages. Strong differences in the regional age distribution likely affect both the mix and levels of retail goods and services demanded by area residents.

**Table 4. Crawford County Age Distribution**

Population (% of total)	Crawford	State of Iowa
Under 5 years	7.0% >	6.3%
Age 5 to 17	18.2% >	16.9%
Age 18 to 24	9.1% <	10.1%
Age 65 years and over	17.5% >	17.1%
Median age	38.3 >	0.0

> Higher than state  
< Lower than state

# Retail Performance Measures

## Peer Group Comparisons

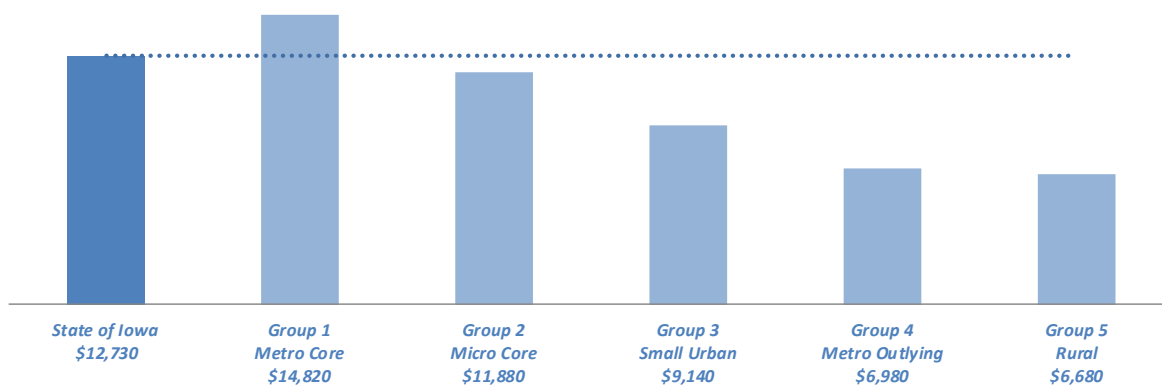
Iowa's 99 counties and their trade centers vary in the level and types of retail activity they can support. In general, retail sector size and diversity tend to increase with community size. Other determining factors include the proximity and size of competing trade centers in neighboring counties and the overall population density in the region. Counties that are similar across these dimensions serve as useful benchmarks for gauging local retail performance.

This report assigns all counties in Iowa to peer groups based on their population size and urbanization characteristics. **Table 5** contains peer group definitions. The relevant peer group for the county is highlighted in blue (see Pages 23-24 for a complete list of counties by peer group). **Figure 10** compares the average sales performance of all county peer groups during the most recent fiscal year.

Table 5. Peer Group Definitions

Group	Metropolitan or Micropolitan Status	Number of Counties	% of State Taxable Sales
Group 1	Core county of a metropolitan statistical area	10	64.8%
Group 2	Core county of a micropolitan statistical area	17	13.7%
<b>Group 3</b>	<b>Non-metro county whose largest city is between 2,500 to 9,999 in population</b>	<b>41</b>	<b>14.5%</b>
Group 4	Outlying (non-core) county in a metropolitan statistical area	11	4.3%
Group 5	Non-metro county whose largest city is less than 2,500 in population	20	2.8%

Figure 10. Average Sales Per Capita by County Peer Group, FY2019

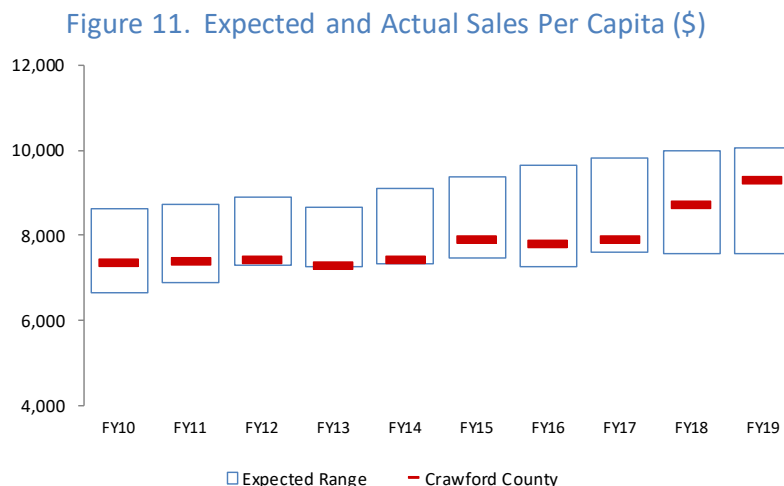


## Retail Performance Measures (continued)

This section illustrates how the county's recent per capita sales levels compare to typical and top values among counties in its peer group.

### Expected Range for Local Sales Per Capita

**Figure 11** compares county sales levels to a range of "expected," or typical, values for peer group counties. The blue rectangles illustrate the range of expected values, defined as any value between the 25th to the 75th percentile for the peer group in each year. The red dashes show the actual local per capita sales performance.



### Peer Group Rankings

**Table 6** identifies the top performers in the county's peer group, as measured by sales per capita. Statewide and peer group averages are also provided, along with the county's ranking among its peers.

See pages 23-24 for a listing of all counties in the peer group.

**Table 6. Per Capita Sales Comparisons**

Area Name	FY2019
State of Iowa	\$12,731
Peer group average	9,136
Crawford ( #17/41 in peer group)	9,266
<i>Peer Group Top 10</i>	
Palo Alto	12,701
Iowa	12,474
Cass	12,465
Winneshiek	12,213
Union	11,806
Sioux	11,787
Appanoose	11,191
Clarke	11,023
Hancock	10,580
Kossuth	10,496

## Retail Performance Measures (continued)

This section introduces three related retail performance measures that are based on a hypothetical “self-sufficiency,” or “break-even” level of sales at which the county satisfies all of the retail needs of its own residents (see definition on Page 17). At the break-even level, any sales lost from residents’ shopping elsewhere are exactly offset by local sales to non-residents.

### Trade Surplus or Leakage

Trade surplus or leakage measures the dollar difference between the county’s actual sales and its break-even sales target. **Table 7** shows inflation-adjusted estimates of sales surplus or leakage in \$ millions.

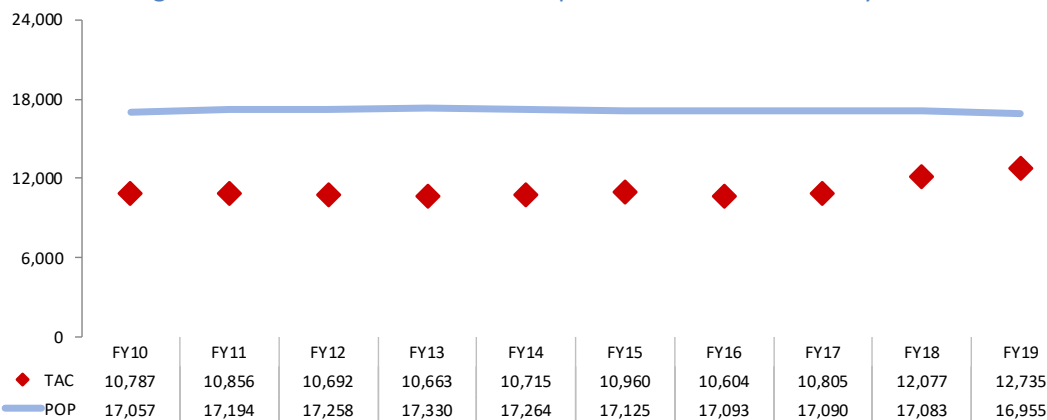
Table 7. Breakeven Analysis

Crawford County	FY2010	FY2011	FY2012	FY2013	FY2014	FY2015	FY2016	FY2017	FY2018	FY2019
Statewide average spending per person (\$)	12,028	12,107	12,348	12,202	12,324	12,745	12,937	12,878	12,722	12,731
<i>x local income adjustment</i>	0.96	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
= Annual retail needs of local residents (\$)	11,605	11,687	11,925	11,791	11,914	12,327	12,518	12,468	12,322	12,337
<i>x County population estimate</i>	17,057	17,194	17,258	17,330	17,264	17,125	17,093	17,090	17,083	16,955
Breakeven sales target (\$ millions)	197.9	200.9	205.8	204.3	205.7	211.1	214.0	213.1	210.5	209.2
County actual sales (\$ millions)	125.2	126.9	127.5	125.7	127.7	135.1	132.7	134.7	148.8	157.1
Estimated surplus (+) or leakage (-)	-72.8	-74.1	-78.3	-78.6	-78.0	-76.0	-81.2	-78.4	-61.7	-52.1

### Trade Area Capture

The extent of a county’s “trade area” can be approximated by converting its sales from dollars into annual customer equivalents. If the customer metric exceeds the resident population, the county’s geographic trade area likely extends beyond its borders. If below, the trade area likely overlaps or is subsumed by that of a nearby county. **Figure 12** illustrates the county’s estimated trade area capture (TAC) relative to its population size (POP).

Figure 12. Estimated Trade Area Capture for Crawford County



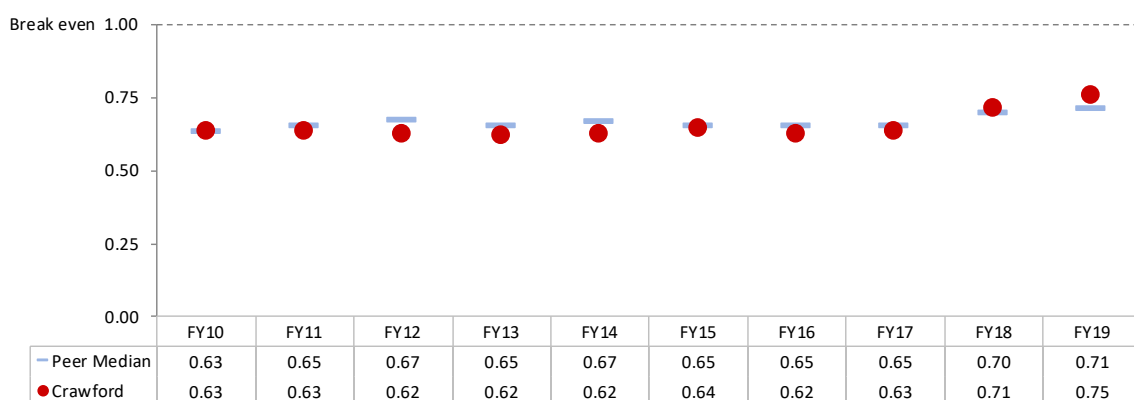
# Retail Performance Measures (continued)

## The Pull Factor Ratio

A pull factor ratio describes the size of a city's retail customer base in relation to its own population size. The ratio is derived by dividing the estimated trade area capture value by the number of county residents.

Pull factors can vary widely from one county to the next, but they should be somewhat comparable among peer counties. **Figure 13** shows recent trends in pull factor ratios for the county and its peer group. The county's pull factor values are indicated with red circles. The blue dashes indicate the median pull factor for the peer group in each year.

Figure 13. Pull Factor Comparison With Peer Group



## Interpreting Pull Factors

= 1.0

A pull factor ratio equal to 1.0 suggests that the county's merchants are just satisfying the retail demands of local residents. This is equivalent to the "break even" sales level where the county is experiencing neither a surplus or leakage of sales.

> 1.0

A pull factor ratio greater than 1.0 suggests that the county's merchants are attracting shoppers from outside the county. For example, a county whose retail customer base is 25 percent larger than its population would have a pull factor of 1.25.

A high pull factor may send a false signal of retail strength. Pull factors may be inflated by the presence of one or more businesses that serve as a regional draw in a particular sales category, even if substantial sales leakage is occurring in other local retail segments.

< 1.0

A pull factor ratio less than 1.0 indicates that the county's retail sector cannot satisfy all of the retail needs of its own residents.

A low pull factor does not necessarily indicate untapped sales potential in the local retail sector. Most smaller counties should expect to lose at least some fraction of their residents' spending to larger regional and metropolitan trade centers.

## Retail Performance Measures (continued)

### Sales Performance by Business Group

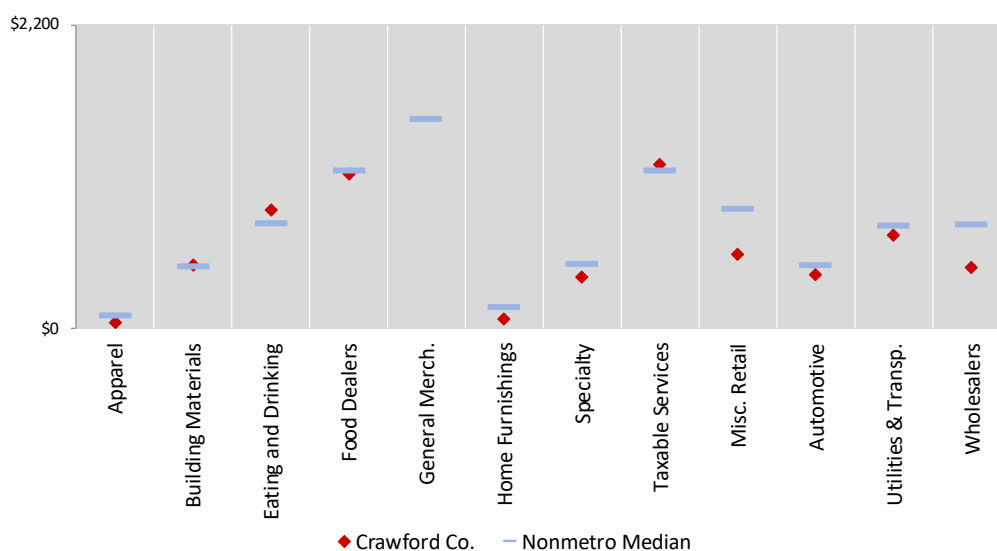
Areas of strength or weakness in the local retail sector may be evident from the sales levels in specific types of businesses. This section examines county-level sales across 12 broad categories of retail firms (see Table 11 on Pages 21-22 for business group definitions).

To avoid misinterpreting the data, readers should note the following:

- The tabulations by business group reflect the type of *firm* where a retail transaction occurred, but do not necessarily identify the specific type of *merchandise* that was sold.
- Sales for the Food Dealers group exclude most foods purchased for home consumption. Firms in this group include grocery stores, specialty grocers, and convenience stores. Gasoline stations with convenience stores are also included; however, their gasoline sales are excluded.
- The Automotive group includes auto parts stores, recreational and other motorized vehicle dealers, and new and used car dealers. Sales data for this group exclude automobile sales, which are taxed separately via registration fees.
- The Wholesale group includes wholesale firms that also engage in retail sales. Sales data for this group describe only their retail transactions.

**Figure 14** compares per capita sales in the county to a group median value for all of Iowa's metropolitan or non-metropolitan counties, whichever applies. The county's data are suppressed for any business groups that did not meet a minimum threshold for number of reporting firms.

Figure 14. Business Group Sales Per Capita



# Retail Performance Measures (continued)

## Business Group Summary

**Table 8** provides multiple measures of county sales by business group, including total taxable sales, the annualized number of reporting firms, and annual averages for sales per firm and sales per person. Benchmark values for the state and peer counties are also provided.

County data are suppressed for any business groups that did not meet a minimum threshold for number of reporting firms.

**Table 8. Crawford County Taxable Sales Summary by Business Group**

Business Group Totals and Averages	Crawford County FY19 Totals		Average Sales Per Firm (\$)	
Type of Firm	Total Taxable Sales (\$)	Reporting Firms	Crawford County	State of Iowa
Apparel Stores	784,566	8	98,071	602,183
Building Materials Stores	7,783,706	11	707,610	2,140,463
Eating and Drinking Establishments	14,660,691	42	351,154	580,536
Food Stores (excluding non-taxable food items)	18,965,789	15	1,243,658	1,181,511
General Merchandise Stores				5,845,838
Home Furnishings Stores	1,183,865	10	118,387	880,390
Specialty Retail Stores	6,382,953	58	109,579	218,700
Service Establishments	20,164,165	189	106,548	179,277
Miscellaneous Retail Firms	9,085,963	81	111,827	269,736
Automotive and Related Stores	6,626,054	13	519,691	899,706
Utilities and Transportation Services	11,511,871	36	322,010	996,708
Retail Sales by Wholesale Firms	7,497,848	25	302,943	942,326

Per Capita Comparisons	Crawford County Averages (\$)		FY19 Benchmark Values (\$)	
Type of Firm	real average FY16 - FY18	FY19	Non-Metro Median	State of Iowa
Apparel Stores		46	85	313
Building Materials Stores	437	459	443	930
Eating and Drinking Establishments	875	865	757	1,436
Food Stores (excluding non-taxable food items)	1,155	1,119	1,140	1,154
General Merchandise Stores			1,510	1,464
Home Furnishings Stores	89	70	152	374
Specialty Retail Stores	367	376	466	979
Service Establishments	1,167	1,189	1,136	1,850
Miscellaneous Retail Firms	530	536	860	1,078
Automotive and Related Stores	449	391	454	649
Utilities and Transportation Services	685	679	737	1,261
Retail Sales by Wholesale Firms	426	442	751	1,242

**Note:** **Table 11** on Pages 21-22 lists the specific types of firms in each business group and provides the statewide distribution of tax returns, total sales, and per capita sales by detailed business type.

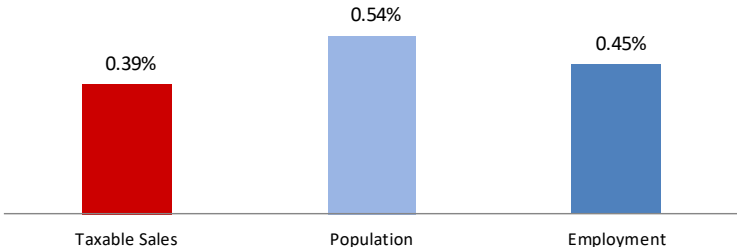
## Regional Competition

This section explores some of the competitive forces at work within the region. First described is the county's role as a trade center within the state. Next, broader regional trade patterns are illustrated using comparative sales measures in nearby counties. Finally, commuting data help to identify sources and destinations of local workers.

## County Shares

**Figure 15** illustrates the county's contributions as a trade, population, and employment center within the state. The county's percentage share of statewide taxable sales is contrasted with its shares of population and jobs.

### Figure 15. Crawford County Shares of State Totals



**Table 9** lists cities within the county that reported taxable sales activity during the most recent fiscal year.

Values for unincorporated areas and for cities with 10 or fewer sales tax permit-holders are suppressed; however, sales data for those localities are included within the county totals.

Values for any cities marked with an asterisk (\*) include neighboring county residents and retailers who fall within the city limits; consequently, the sum of values for all cities listed in Table 7 may exceed reported totals for the county.

### Table 9. Reporting Jurisdictions in Crawford County

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## Regional Competition (continued)

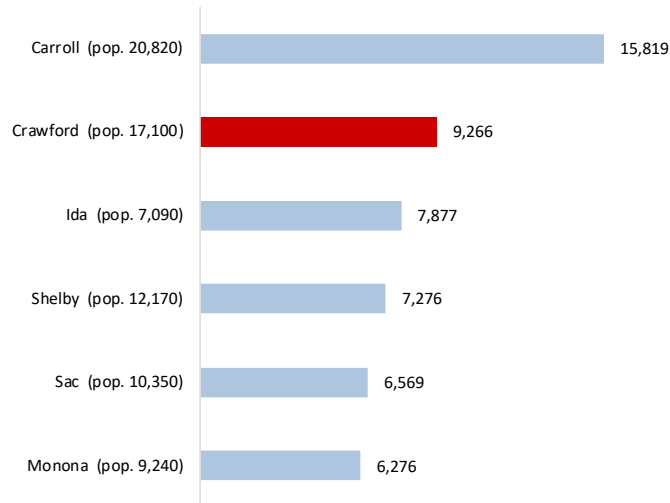
### Neighboring Area Sales

Regional shopping patterns may be inferred from relative trade levels in surrounding counties.

**Figure 16** compares county per capita sales to averages in neighboring counties.

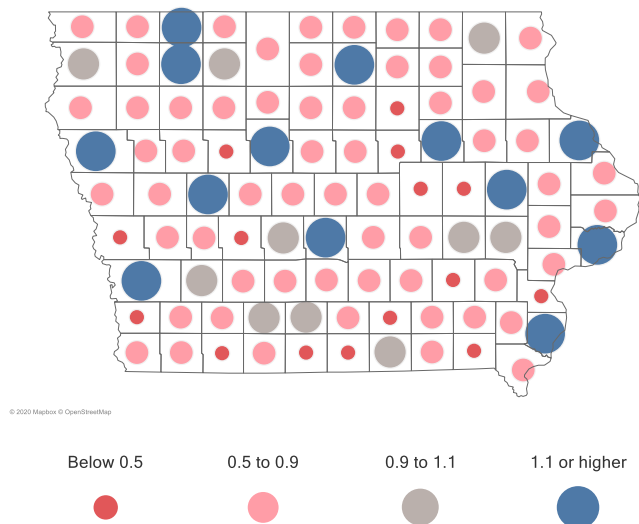
The comparison group includes the five nearest counties as measured from their geographic midpoints. The counties are listed in descending order by their average per capita sales. Population sizes for each county, as of the 2010 Census, are also indicated.

Figure 16. Per Capita Retail Sales (\$)



**Figure 17** illustrates county retail pull factors (see Page 11 for a definition of pull factors). The counties with a pull factor exceeding 1.0, identified in the map with large blue dots, are likely exerting a strong retail influence on trade centers in neighboring counties. Counties with pull factors below 1.0 are leaking sales on a county-wide basis, but might still contain one or more strong local trade centers.

Figure 17. County Pull Factors



## Regional Competition (continued)

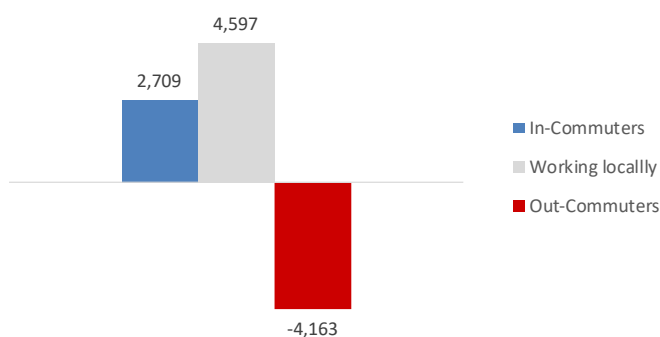
### Commuting Patterns

The daily exchange of workers with surrounding areas add or subtracts to the county's potential retail customer base. The sources and destinations of commuting flows can reveal regional economic dependencies that influence local retail conditions.

**Figure 18** summarizes the estimated daily worker flows to and from the county.

All commuting estimates on this page describe flows of workers in wage and salary positions only. Self-employed workers are excluded.

**Figure 18. Commuting Inflows and Outflows: Crawford County**



**Table 10** shows commuting probabilities for local residents and workers. The table also identifies the top workplace destination for local residents and top county supplying workers to local employers.

Average commuting rates in peer counties are included for comparison.

**Table 10. Crawford County Commuting Probabilities**

	Number	% of total	Peer average
<b>Workplaces of Crawford County residents:</b>			
Working within the county	4,597	52.5%	47.4%
Working elsewhere:	4,163	47.5%	52.6%
in Carroll Co.	484	5.5%	
in all other areas	3,679	42.0%	
<b>Sources for Crawford County workers:</b>			
Living within the county	4,597	62.9%	54.1%
Commuting from elsewhere:	2,709	37.1%	45.9%
from Carroll Co.	382	5.2%	
from all other areas	2,327	31.9%	

## Iowa's Retail Sales Tax Reporting

The state of Iowa imposes a six percent tax on the gross receipts from sales of taxable tangible personal property and taxable services.

Retailers file sales tax returns to the Iowa Department of Revenue on a semi-monthly, monthly, quarterly, or annual basis depending on their amount of sales.

The Department of Revenue compiles the data from sales tax returns and publishes quarterly and annual retail sales tax reports that provide the primary source of data for this report.

The state's reporting does not include retail transactions that are exempt from the statewide sales tax. Consequently, this report describes only taxable, not total, retail sales. Several types of exempt activity are listed on the following page.

Occasional anomalies may arise in retail sales data reported at the local level. For example, the locations of specific firms may not precisely align with the administrative jurisdictions used for tax reporting purposes. Such discrepancies may result in under-statement or over-statement of actual local retail sales activity.

When analyzing trends, users should note that changes in Iowa's retail sales tax laws or changes in administrative or accounting practices may affect the comparability of taxable sales data over time.

Other cautions for using taxable sales data to analyze local retail performance are listed at right. Users seeking more detailed information are encouraged to consult the Iowa Department of Revenue's website at <https://tax.iowa.gov/>.

### Cautions and Limitations for Interpreting Reported Sales Data

- **Non-Taxable Goods & Services.** Because certain goods and services are exempt from the statewide sales tax, the sales information presented in this report provides only a partial picture of retail and service sector activity in Iowa's communities.
- **E-commerce Sales.** Neither the volume of e-commerce purchases by Iowa residents nor e-commerce sales by Iowa retailers are currently measurable.
- **Large Public Institutions.** The presence of large public institutions such as correctional facilities or universities may distort local sales measures, as their institutional purchases are excluded from taxable sales but their residents are included in local population estimates.
- **Sales or Service Territories.** Sales levels in some cities may be inflated by the administrative presence of firms serving a much larger geographic service territory, such as rural telecommunications and other cable or internet service providers.
- **Non-Disclosure Rules.** To avoid disclosing information traceable to specific firms, the Iowa Department of Revenue only reports data from localities with 10 or more tax returns filed per quarter or 40 returns per year. Sales data for areas below this threshold are grouped into a "remainder of county" value.

### Notable Exclusions from Iowa's Retail Sales Tax

The retail data analyzed for this report only capture transactions that are subject to Iowa's statewide sales tax. In general, merchandise goods are taxable unless specifically exempted, whereas services are exempted from the tax unless specifically enumerated by the state.

Following are several types of sales activity that are **not** covered by this report.

**Exempt or Excluded Goods.** Some of the goods not subject to the sales tax include:

- Certain foods for home consumption
- Prescription drugs and medical devices
- New or used cars and other vehicles, as they are taxed separately under the state's one-time registration fee.
- Gasoline, which is subject to a separate fuel tax

**Exempt Services.** Unlike tangible goods, services are exempt from tax unless specifically enumerated. Many professional services such as medical and legal services are exempt from the sales tax.

**Sales to Tax-Exempt Organizations.** Local and state government entities are exempt from the sales tax. Sales to private nonprofit educational institutions for educational purposes are also exempt. Sales from fund-raising activities are exempt from sales tax if the proceeds are used for educational, religious, or charitable purposes.

**Internet/Catalog Sales.** Prior to 2019, many out-of-state purchases by Iowa residents were untaxed. Iowa implemented regulatory changes on July 1, 2019, to require collection of sales taxes on residents' purchases from firms without a physical presence in Iowa but who generate \$100,000 or more in gross revenues from Iowa sales.

**Sales to Agriculture.** Sales tax exemptions for agriculture apply to the purchase of feed, seed, fertilizer, farm machinery and equipment, fuels and utilities, and some services.

**Utilities.** The state has phased out taxes on sales of metered gas, electricity, and fuel used as energy in residential dwellings, apartment units and condominiums. This phase-out was completed by 2006. Specific exemptions for utilities may also apply to certain businesses and industries.

**Sales to Manufacturing and Other Industries.** The state exempts sales of many goods and services that are used as inputs to industrial processes. Exemptions to manufacturing include purchases of tangible inputs that become an integral part of manufactured goods ultimately sold at retail; fuels, chemicals, and other inputs that are consumed during production processes; industrial machinery, equipment, and some computer equipment; and many services.

The state has created additional exemptions targeted toward specific industries such as wind energy and information technology. See the Iowa Department of Revenue Web site for more detailed information.

*More detailed information about Iowa's sales tax is available from the Iowa Department of Revenue at <https://tax.iowa.gov/iowa-sales-and-use-tax-guide>*

### Definitions of Retail Measures

**Retail Sales.** This term refers to the reported sales of goods and services that are subject to Iowa's retail sales tax. Iowa's current sales tax rate is 6 percent.

**Fiscal Year.** Iowa's annual sales tax reports reflect a July 1 - June 30 fiscal year period.

**Reporting Firms.** This value reflects the average number of tax returns filed each quarter during the year, and it serves as a proxy for the number of local retail firms.

**Nominal Sales.** Nominal sales are the dollar amounts as reported in the year the transactions actually took place. These values have not been adjusted for inflation.

**Real Sales.** "Real" dollar values have been standardized to reflect the purchasing power of a dollar in the current fiscal year, thus removing the effects of price inflation.

**Business Group Sales.** The state reports county-level taxable sales data for 12 business groups. The data reflect the business classification of the firms making the sales, not the specific goods and services that they sold.

**Sales Per Firm.** Per firm sales are calculated by dividing the annual dollar value of sales by the average number of reporting firms in that year.

**Sales Per Capita.** Per capita (or "per person") sales are calculated by dividing the dollar value of sales by the estimated population for the subject place. No distinctions are made among residents of households, educational institutions, nursing homes, or other group quarters in the calculation of per capita sales and related indicators.

**Expected Per Capita Spending.** An expected value for residents' average spending on taxable retail goods and services provides the basis for breakeven sales, trade surplus and leakage, trade area capture, and pull factor values. This measure is sensitive to local income levels. For more information about its derivation, please contact the author.

**Self-Sufficiency (or Breakeven) Level of Sales.** This hypothetical value describes the amount of sales that would be generated if the county's retailers (1) served only local residents and (2) satisfied all of those residents' retail needs. It is equivalent to the total estimated spending by residents on taxable goods and services purchased anywhere within Iowa. To derive this value, the dollar amount of statewide average per capita spending on taxable goods and services is adjusted up or down by a factor that reflects local income characteristics, and is then multiplied by the county's population size.

**Trade Surplus or Leakage.** Trade surplus or leakage measures the dollar difference between the county's actual sales and its breakeven sales level.

**Trade Area Capture.** Trade area capture translates local retail sales from dollars to annual customer equivalents. It is estimated by dividing the county's actual total sales by the expected per capita average spending of residents.

**Pull Factor Ratio.** A county's pull factor ratio is calculated by dividing its trade area capture measure by its resident population.

### Other Data Sources and Notes

**Population:** Population values in this report describe the estimated, average number of residents during a given fiscal year. The estimates are based on data released annually through the Population Estimates Program, U.S. Census Bureau. The Census Bureau's published estimates, which reflect the population on July 1<sup>st</sup> of each year, may differ from the average values appearing in this report.

With each of its annual data releases, the U.S. Census Bureau may revise its estimates from prior years. This report incorporates the most recently available estimates and revisions. As a consequence, population-based statistics published in this report may not reconcile with those appearing in earlier retail trade analysis reports. In most cases, the discrepancies are minor.

**City-to-County Assignments:** The incorporated territory of many Iowa cities crosses the boundaries of two or more counties. For this report, all cities are assigned to the county that contained the greatest percentage of its population in the 2010 Census.

**Commuting Flows:** Local Employment Dynamics Program, U.S. Census Bureau. These commuting flows describe the place of work and place of residence of wage and salary workers in . Self-employed individuals such as sole proprietors and partners are excluded from these data.

**Employment:** U.S. Bureau of Economic Analysis (annual) and U.S. Bureau of Labor Statistics (monthly). Employment includes full-time and part-time wage and salary jobs, with all jobs counted equally.

**Unemployment:** Local Area Unemployment Statistics, U.S. Bureau of Labor Statistics.

**Average Wages and Salaries per Job:** U.S. Bureau of Economic Analysis.

**Transfer Payments per Capita:** U.S. Bureau of Economic Analysis.

**Median Household Income and Poverty:** Small Area Income and Poverty Estimates, U.S. Census Bureau.

**Price Deflators:** Except where otherwise noted in this report, the dollar values for all retail sales and personal income data have been adjusted for inflation using the Implicit Price Deflator for Personal Consumption Expenditures published by the U.S. Bureau of Economic Analysis.

## Table 11. Business Group Definitions (page 1 of 2)

Business Group	Number of Returns	Percent of Returns	Taxable Sales	Per Capita Sales
<b>Apparel Group</b>				
Clothing and Clothing Accessories Stores	5,699	1.7	\$832,931,221	\$264
Shoe Stores	853	0.3	\$153,445,151	\$49
Group Totals	6,552	1.9	\$986,376,372	\$313
<b>Building Materials Group</b>				
Building Material Dealers	1,610	0.5	\$2,123,851,271	\$674
Garden Supply Stores	1,998	0.6	\$413,652,008	\$131
Hardware Stores	1,167	0.3	\$275,998,598	\$88
Mobile Home Dealers	167	0.1	\$6,185,666	\$2
Paint and Glass Stores	535	0.2	\$111,141,666	\$35
Group Totals	5,477	1.6	\$2,930,829,209	\$930
<b>Eating and Drinking Group</b>				
Restaurants, Taverns, and Bars	31,196	9.1	\$4,527,601,584	\$1,436
Group Totals	31,196	8.8	\$4,527,601,584	\$1,436
<b>Food Dealers Group</b>				
Gas Stations/Convenience Stores Selling Gas	6,784	2.0	\$1,752,135,115	\$556
Grocery Stores and Convenience Stores	3,943	1.2	\$1,828,509,396	\$580
Specialized Groceries	1,590	0.5	\$57,522,673	\$18
Group Totals	12,317	3.6	\$3,638,167,184	\$1,154
<b>General Merchandise Group</b>				
Department Stores	648	0.2	\$2,899,566,505	\$920
Miscellaneous Merchandise Stores	2,280	0.7	\$1,701,209,150	\$540
Variety Stores	229	0.1	\$13,051,913	\$4
Group Totals	3,157	0.9	\$4,613,827,568	\$1,464
<b>Home Furnishings And Appliances Group</b>				
Appliances and Entertainment Equipment	2,099	0.6	\$457,528,710	\$145
Furniture Stores	1,523	0.4	\$427,743,342	\$136
Home Furnishing Stores	1,738	0.5	\$294,450,210	\$93
Group Totals	5,360	1.6	\$1,179,722,262	\$374
<b>Miscellaneous Group</b>				
Agricultural Production and Services	14,350	4.2	\$498,975,057	\$158
Apparel and Textile Manufacturers	90	0.0	\$4,682,672	\$1
Carpentry Contractors	1,452	0.4	\$48,745,963	\$15
Electrical Contractors	3,399	1.0	\$170,662,243	\$54
Food Manufacturers	1,001	0.3	\$110,801,520	\$35
Furniture, Wood and Paper Manufacturers	1,167	0.3	\$161,209,518	\$51
General Contractors	5,355	1.6	\$210,022,341	\$67
Industrial Equipment Manufacturers	1,624	0.5	\$398,292,759	\$126
Mining	1,286	0.4	\$197,678,682	\$63
Miscellaneous Manufacturers	2,456	0.7	\$143,299,551	\$45
Non-Metallic Product Manufacturers	1,859	0.5	\$427,390,054	\$136
Other Special Trade Contractors	4,590	1.3	\$325,574,195	\$103
Painting Contractors	2,468	0.7	\$35,623,371	\$11
Plumbing and Heating Contractors	5,150	1.5	\$475,089,413	\$151
Publishers Of Books and Newspapers and Commercial Printers	1,224	0.4	\$76,845,599	\$24
Unclassified	2,936	0.9	\$114,255,295	\$36
Group Totals	50,407	14.7	\$3,399,148,233	\$1,078
<b>Motor Vehicle Group</b>				
Automotive Parts and Accessories	4,810	1.4	\$726,778,297	\$231
New and Used Car Dealers	2,934	0.9	\$1,050,213,464	\$333
Recreational and All Other Motorized Vehicles	1,345	0.4	\$267,365,159	\$85
Group Totals	9,089	2.7	\$2,044,356,920	\$649

## Table 11. Business Group Definitions (page 2 of 2)

Business Group	Number of Returns	Percent of Returns	Taxable Sales	Per Capita Sales
<b>Services Group</b>				
Arts and Entertainment	9,287	2.7	\$588,013,185	\$187
Auto Rental and Storage	4,588	1.3	\$363,910,933	\$115
Auto Repair	16,924	4.9	\$1,188,977,539	\$377
Beauty/Barber Shops	26,597	7.8	\$431,857,871	\$137
Education and Athletic Events	1,595	0.5	\$93,381,121	\$30
Electronic and Precision Equipment Repair and Maintenance	1,726	0.5	\$68,393,437	\$22
Employment Services	516	0.2	\$31,618,871	\$10
Finance, Insurance, Real Estate and Leasing	4,756	1.4	\$129,630,650	\$41
Footwear and Leather Repair	119	0.0	\$2,583,168	\$1
Funeral Service and Crematories	1,308	0.4	\$60,651,730	\$19
Hotels and All Other Lodging Places	8,394	2.4	\$1,091,324,582	\$346
Laundry and Floor Cleaning	2,222	0.6	\$111,191,763	\$35
Miscellaneous Repairs	7,700	2.2	\$208,564,402	\$66
Motion Picture and Video Industries	3,168	0.9	\$222,194,199	\$70
Other Business Services	16,221	4.7	\$803,048,154	\$255
Other Personal Services	10,630	3.1	\$280,797,275	\$89
Other Services	8,334	2.4	\$100,880,643	\$32
Photographic Studios	5,125	1.5	\$46,223,501	\$15
Upholstery and Furniture Repair	760	0.2	\$5,715,996	\$2
Watch, Clock, Jewelry Repair	119	0.0	\$1,532,411	\$0
Group Totals	130,089	38.0	\$5,830,491,431	\$1,850
<b>Specialty Retail Stores Group</b>				
Beauty and Health ( Includes Pharmacies and Drug Stores)	3,341	1.0	\$507,631,493	\$161
Book and Stationery Stores	1,345	0.4	\$143,675,957	\$46
Direct Sellers	3,921	1.1	\$125,320,447	\$40
Electronic Shopping and Mail Order Houses	950	0.3	\$8,747,952	\$3
Florists	1,410	0.4	\$43,340,942	\$14
Fuel and Ice Dealers	97	0.0	\$7,088,601	\$2
Hobby and Toy	6,767	2.0	\$192,624,816	\$61
Jewelry	1,850	0.5	\$179,477,462	\$57
Liquor Stores	876	0.3	\$81,893,997	\$26
Other Specialty	24,028	7.0	\$1,080,529,487	\$343
Sporting Goods	4,715	1.4	\$519,996,903	\$165
Stationery, Gift, Novelty	2,097	0.6	\$58,036,931	\$18
Used Merchandise Stores	4,086	1.2	\$77,614,478	\$25
Vending Machine Operators	979	0.3	\$61,079,745	\$19
Group Totals	56,462	16.5	\$3,087,059,211	\$979
<b>Utilities and Transportation Group</b>				
Communications	3,999	1.2	\$1,389,786,930	\$441
Electric and Gas	1,483	0.4	\$1,554,356,922	\$493
Transportation and Warehousing	3,698	1.1	\$219,506,021	\$70
Water and Sanitation	6,774	2.0	\$811,721,475	\$258
Group Totals	15,954	4.7	\$3,975,371,348	\$1,261
<b>Wholesale Goods Group</b>				
Apparel, Piece Goods	59	0.0	\$765,837	\$0
Construction Materials	3,380	1.0	\$1,720,950,477	\$546
Farm and Garden Equipment	5,297	1.5	\$1,323,204,283	\$420
Furniture and Home Furnishings	176	0.1	\$83,117,679	\$26
Groceries and Farm Products	601	0.2	\$74,268,333	\$24
Miscellaneous Durable Goods	676	0.2	\$78,105,117	\$25
Miscellaneous Non-Durable Goods	5,921	1.7	\$564,903,295	\$179
Motor Vehicle Parts and Supplies	505	0.1	\$68,870,161	\$22
Group Totals	16,615	4.8	\$3,914,185,182	\$1,242
<b>State Totals</b>	<b>342,675</b>	<b>100.0</b>	<b>\$40,127,136,504</b>	<b>\$12,731</b>

## Data Notes (continued)

Table 12. Peer County Groupings and 2010 Population Sizes (page 1 of 2)

	2010 Population	Metropolitan or Micropolitan Area
1	Black Hawk.....	131,090 Waterloo-Cedar Falls, IA Metropolitan Statistical Area
	Dallas.....	66,135 Des Moines-West Des Moines, IA Metropolitan Statistical Area
	Dubuque.....	93,653 Dubuque, IA Metropolitan Statistical Area
	Johnson.....	130,882 Iowa City, IA Metropolitan Statistical Area
	Linn.....	211,226 Cedar Rapids, IA Metropolitan Statistical Area
	Polk.....	430,640 Des Moines-West Des Moines, IA Metropolitan Statistical Area
	Pottawattamie.....	93,158 Omaha-Council Bluffs, NE-IA Metropolitan Statistical Area
	Scott.....	165,224 Davenport-Moline-Rock Island, IA-IL Metropolitan Statistical Area
	Story.....	89,542 Ames, IA Metropolitan Statistical Area
	Woodbury.....	102,172 Sioux City, IA-NE-SD Metropolitan Statistical Area
2	Boone.....	26,306 Boone, IA Micropolitan Statistical Area
	Buena Vista.....	20,260 Storm Lake, IA Micropolitan Statistical Area
	Carroll.....	20,816 Carroll, IA Micropolitan Statistical Area
	Cerro Gordo.....	44,151 Mason City, IA Micropolitan Statistical Area
	Clay.....	16,667 Spencer, IA Micropolitan Statistical Area
	Clinton.....	49,116 Clinton, IA Micropolitan Statistical Area
	Des Moines.....	40,325 Burlington, IA-IL Micropolitan Statistical Area
	Dickinson.....	16,667 Spirit Lake, IA Micropolitan Statistical Area
	Jasper.....	36,842 Newton, IA Micropolitan Statistical Area
	Jefferson.....	16,843 Fairfield, IA Micropolitan Statistical Area
	Lee.....	35,862 Fort Madison-Keokuk, IA-IL-MO Micropolitan Statistical Area
	Mahaska.....	22,381 Oskaloosa, IA Micropolitan Statistical Area
	Marion.....	33,309 Pella, IA Micropolitan Statistical Area
	Marshall.....	40,648 Marshalltown, IA Micropolitan Statistical Area
	Muscatine.....	42,745 Muscatine, IA Micropolitan Statistical Area
	Wapello.....	35,625 Ottumwa, IA Micropolitan Statistical Area
	Webster.....	38,013 Fort Dodge, IA Micropolitan Statistical Area
3 (continued next page)	Allamakee.....	14,330 None (not part of a metropolitan or micropolitan area)
	Appanoose.....	12,887 None
	Buchanan.....	20,958 None
	Cass.....	13,956 None
	Cedar.....	18,499 None
	Cherokee.....	12,072 None
	Chickasaw.....	12,439 None
	Clarke.....	9,286 None
	Crawford.....	17,096 None
	Delaware.....	17,764 None
	Emmet.....	10,302 None
	Fayette.....	20,880 None
	Floyd.....	16,303 None
	Franklin.....	10,680 None
	Greene.....	9,336 None
	Hamilton.....	15,673 None
	Hancock.....	11,341 None
	Hardin.....	17,534 None
	Henry.....	20,145 None
	Howard.....	9,566 None
	Humboldt.....	9,815 None
	Iowa.....	16,355 None

## Data Notes (continued)

Table 12. Peer City Groupings and 2010 Population Sizes (page 2 of 2)

	2010 Population	Metropolitan or Micropolitan Area
3 (continued from previous page)	Jackson.....	19,848 None
	Kossuth.....	15,543 None
	Lucas.....	8,898 None
	Mitchell.....	10,776 None
	Monona.....	9,243 None
	Monroe.....	7,970 None
	Montgomery.....	10,740 None
	O'Brien.....	14,398 None
	Osceola.....	6,462 None
	Page.....	15,932 None
	Palo Alto.....	9,421 None
	Poweshiek.....	18,914 None
	Shelby.....	12,167 None
	Sioux.....	33,704 None
	Tama.....	17,767 None
	Union.....	12,534 None
	Winnebago.....	10,866 None
	Winneshiek.....	21,056 None
	Wright.....	13,229 None
4	Benton.....	26,076 Cedar Rapids, IA Metropolitan Statistical Area
	Bremer.....	24,276 Waterloo-Cedar Falls, IA Metropolitan Statistical Area
	Grundy.....	12,453 Waterloo-Cedar Falls, IA Metropolitan Statistical Area
	Guthrie.....	10,954 Des Moines-West Des Moines, IA Metropolitan Statistical Area
	Harrison.....	14,928 Omaha-Council Bluffs, NE-IA Metropolitan Statistical Area
	Jones.....	20,638 Cedar Rapids, IA Metropolitan Statistical Area
	Madison.....	15,679 Des Moines-West Des Moines, IA Metropolitan Statistical Area
	Mills.....	15,059 Omaha-Council Bluffs, NE-IA Metropolitan Statistical Area
	Plymouth.....	24,986 Sioux City, IA-NE-SD Metropolitan Statistical Area
	Warren.....	46,225 Des Moines-West Des Moines, IA Metropolitan Statistical Area
	Washington.....	21,704 Iowa City, IA Metropolitan Statistical Area
5	Adair.....	7,682 None
	Adams.....	4,029 None
	Audubon.....	6,119 None
	Butler.....	14,867 None
	Calhoun.....	9,670 None
	Clayton.....	18,129 None
	Davis.....	8,753 Ottumwa, IA Micropolitan Statistical Area
	Decatur.....	8,457 None
	Fremont.....	7,441 None
	Ida.....	7,089 None
	Keokuk.....	10,511 None
	Louisa.....	11,387 None
	Lyon.....	11,581 None
	Pocahontas.....	7,310 None
	Ringgold.....	5,131 None
	Sac.....	10,350 None
	Taylor.....	6,317 None
	Van Buren.....	7,570 None
	Wayne.....	6,403 None
	Worth.....	7,598 Mason City, IA Micropolitan Statistical Area

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Find these retail reports and other economic and demographic profiles of Iowa's communities online at:

[www.icip.iastate.edu](http://www.icip.iastate.edu)



## Frequently Asked Questions

**Are business group sales data available at the city level?** Subject to disclosure limitations to protect the confidentiality of local firms, city-level data for up to 12 business groups may be available upon request from the Iowa Department of Revenue.

**Why do historical data in this report differ from previously-published ISU retail reports?** The underlying population and income data used in this report are subject to backward revision by the U.S. Census Bureau and sister agencies, meaning that historical data are revised as new information becomes available. Any revisions to population and income estimates may result in re-statement of per capita retail sales, pull factors, and related measures for prior years. This report incorporates the most recently-revised statistics, and no effort is made to reconcile the historical data with prior versions of the ISU Retail Trade Analysis reports.

**Are the retail sales statistics fully comparable over time?** No. Changes to Iowa's statewide sales tax laws have redefined the mix of goods and services comprising taxable sales transactions over time.

At the local level, changes in the geographic or business group assignments of specific firms may also complicate trend analysis. Notably, the Iowa Department of Revenue in FY2014 reassigned more than 10 percent of Iowa's retailers to different business class codes that better reflect their business focus. A significant change was the reclassification of gasoline stations with convenience stores from the automotive and related group to the food dealers group. These reclassifications should be considered when comparing sales by business group before and after FY 2014.

**Are the pull factors and other retail measures adjusted for differences in local income?** Yes. In calculating local pull factor ratios and estimating trade surplus/leakage values, this report incorporates small area income data available from the American Community Survey (ACS), U.S. Census Bureau. Contact the author for more detailed information about the methodology used for income adjustments.

## Acknowledgements

This project was supported with funding from the Iowa Agriculture and Home Economics Experiment Station, the research program directed by the College of Agriculture and Life Sciences at Iowa State University.

In producing this report, we acknowledge the pioneering work of Kenneth E. Stone, now Professor Emeritus, in applied analysis of retail trade patterns in Iowa's cities and counties.

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