Retail Trade Analysis
Fiscal Year 2019

Story 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.

Table 1. Story County Key Retail Indicators

	FY2018	FY2019	% Change	
Real total taxable sales ($)	1,103,642,759	1,080,443,577	-2.1%	▼
Number of reporting firms (annualized)	1,971	2,003	1.6%	▲
Population	97,030	96,949	-0.1%	▶
Average sales per capita ($)	11,374	11,144	-2.0%	▼
Average sales per firm ($)	559,870	539,480	-3.6%	▼

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.
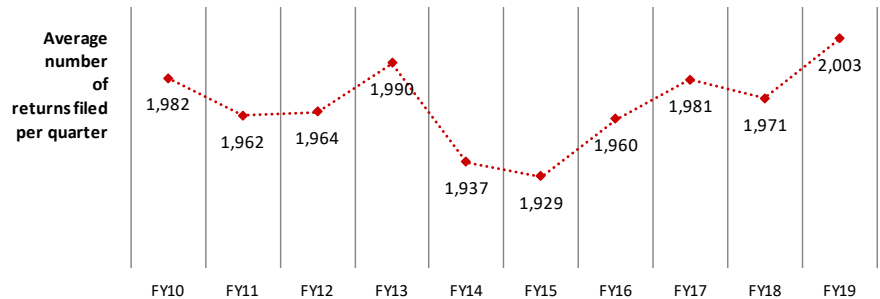
Figure 1. Number of Reporting Establishments

Average number of returns filed per quarter

FY10	FY11	FY12	FY13	FY14	FY15	FY16	FY17	FY18	FY19
1,982	1,962	1,964	1,990	1,937	1,929	1,960	1,981	1,971	2,003

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

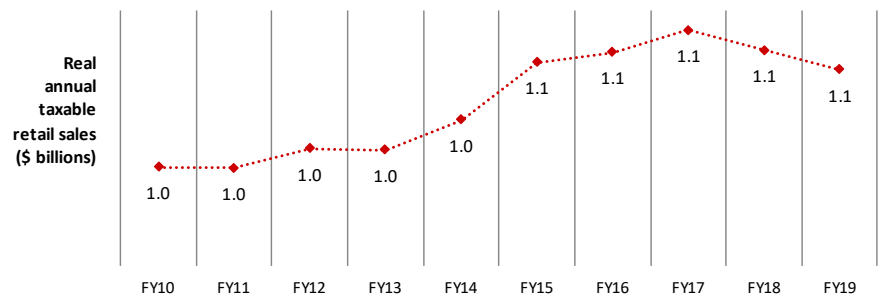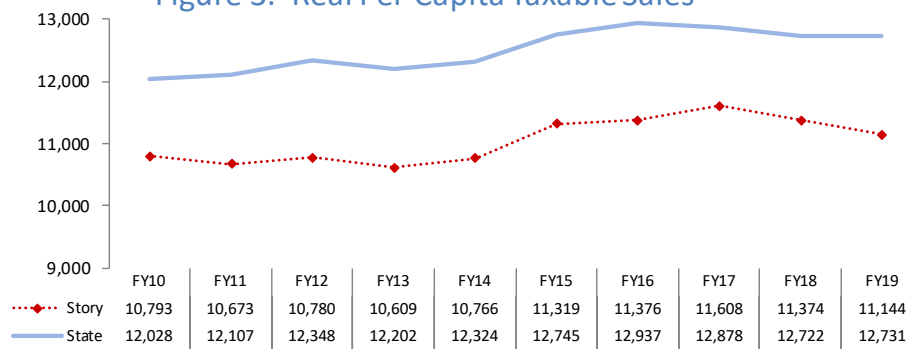## Figure 2. Real Total Taxable Sales

Real annual taxable retail sales ($ billions)

FY10	FY11	FY12	FY13	FY14	FY15	FY16	FY17	FY18	FY19
1.0	1.0	1.0	1.0	1.0	1.1	1.1	1.1	1.1	1.1

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

Figure 3. Real Per Capita Taxable Sales

	FY10	FY11	FY12	FY13	FY14	FY15	FY16	FY17	FY18	FY19
Story	10,793	10,673	10,780	10,609	10,766	11,319	11,376	11,608	11,374	11,144
State	12,028	12,107	12,348	12,202	12,324	12,745	12,937	12,878	12,722	12,731

Historical Trends in Taxable Retail Sales

Table 2. Historical Statistics for Story 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	1,440	169,513,460	630,527,825	437,791	9,199	389,965	11,069
1977	1,526	199,425,377	701,332,300	459,589	10,093	402,043	11,721
1978	1,588	214,752,692	708,236,408	445,993	10,031	396,235	11,985
1979	1,632	244,783,966	749,269,547	459,252	10,497	401,923	12,523
1980	1,667	265,745,307	737,672,581	442,449	10,252	394,146	12,485
1981	1,716	275,837,717	694,700,449	404,896	9,560	350,472	11,327
1982	1,745	285,652,520	672,413,531	385,337	9,265	336,721	10,893
1983	1,796	302,691,248	679,536,150	378,361	9,334	327,385	10,769
1984	1,820	315,650,076	681,190,424	374,280	9,285	320,763	10,683
1985	1,816	326,020,888	679,714,492	374,344	9,219	317,278	10,660
1986	1,858	342,868,676	693,892,282	373,462	9,372	311,144	10,648
1987	1,859	360,154,307	713,453,664	383,887	9,685	329,120	11,110
1988	1,864	372,803,744	712,475,666	382,281	9,681	330,896	11,178
1989	1,882	391,866,435	717,226,609	381,047	9,719	336,241	11,275
1990	1,884	415,954,454	731,797,113	388,376	9,883	340,333	11,379
1991	1,845	447,244,651	754,193,449	408,722	10,132	341,663	11,308
1992	1,850	459,128,597	753,685,602	407,453	10,074	342,012	11,402
1993	1,903	487,569,712	779,755,290	409,751	10,318	342,314	11,543
1994	1,923	502,977,034	787,243,490	409,383	10,365	349,574	11,793
1995	1,932	534,161,817	817,889,923	423,448	10,750	356,788	12,029
1996	1,913	545,718,915	819,225,373	428,353	10,695	357,708	12,294
1997	1,945	585,142,298	860,114,017	442,161	11,115	376,016	12,495
1998	1,974	641,553,710	932,479,880	472,321	11,951	378,426	12,710
1999	1,966	682,114,498	981,688,187	499,396	12,458	404,875	13,239
2000	1,906	723,038,823	1,018,927,916	534,660	12,775	412,564	13,298
2001	1,909	718,538,641	988,700,544	517,848	12,327	413,506	13,339
2002	1,859	712,816,568	968,983,736	521,309	11,952	415,051	13,184
2003	1,753	733,591,820	978,777,838	558,424	11,940	433,650	13,035
2004	1,697	751,741,274	982,846,150	579,338	11,926	441,149	12,906
2005	1,689	757,675,123	965,057,639	571,378	11,653	439,335	12,830
2006	1,719	794,340,209	981,389,843	571,074	11,709	450,918	12,925
2007	1,861	828,336,996	999,985,912	537,482	11,677	442,237	12,773
2008	1,885	850,690,543	996,547,852	528,673	11,430	442,954	12,887
2009	1,970	859,450,955	995,432,191	505,296	11,240	434,644	12,850
2010	1,982	843,152,477	965,687,829	487,168	10,793	417,088	12,028
2011	1,962	857,329,183	964,795,467	491,866	10,673	432,600	12,107
2012	1,964	898,976,506	987,081,375	502,587	10,780	441,036	12,348
2013	1,990	911,639,639	985,997,666	495,414	10,609	435,402	12,202
2014	1,937	957,715,675	1,021,083,128	527,079	10,766	452,587	12,324
2015	1,929	1,029,421,215	1,089,116,869	564,748	11,319	471,222	12,745
2016	1,960	1,045,772,687	1,100,822,799	561,788	11,376	478,872	12,937
2017	1,981	1,086,907,249	1,126,961,740	568,957	11,608	478,871	12,878
2018	1,971	1,084,814,125	1,103,642,759	559,870	11,374	475,534	12,722
2019	2,003	1,080,443,577	1,080,443,577	539,480	11,144	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 4. Population Trends
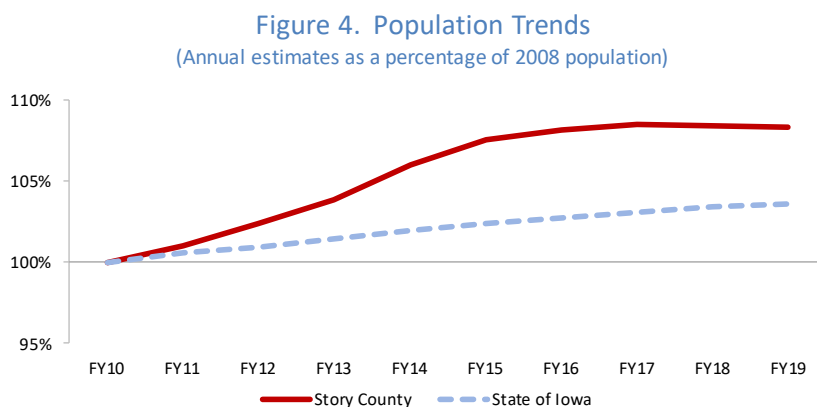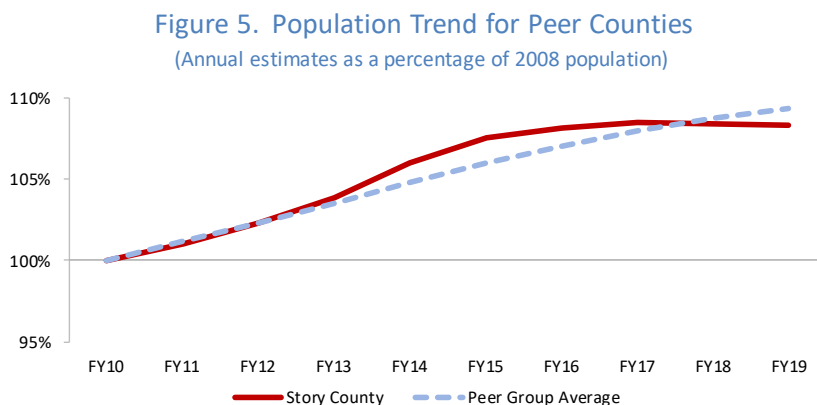(Annual estimates as a percentage of 2008 population)

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.

Figure 5. Population Trend for Peer Counties
(Annual estimates as a percentage of 2008 population)

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
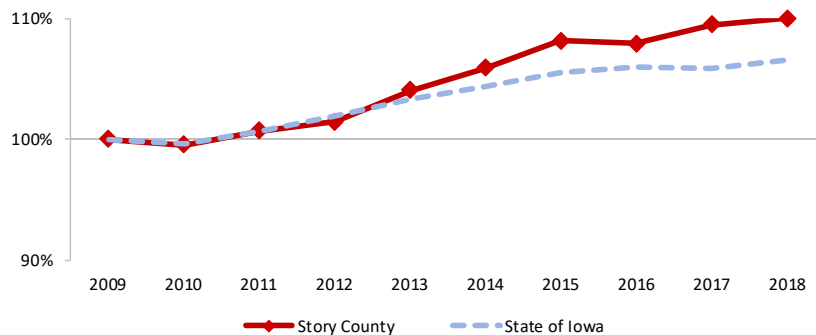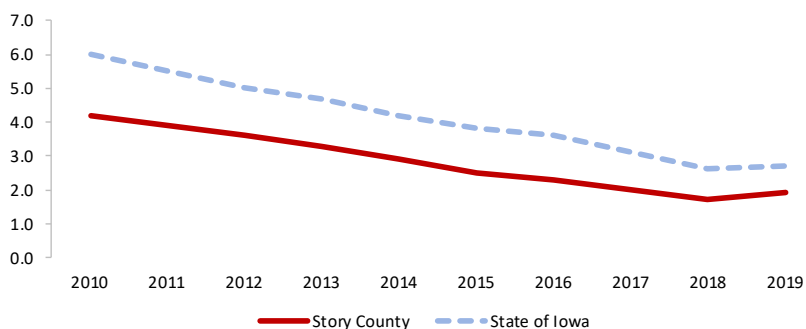(Annual employment as a percentage of 2009 employment)

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.

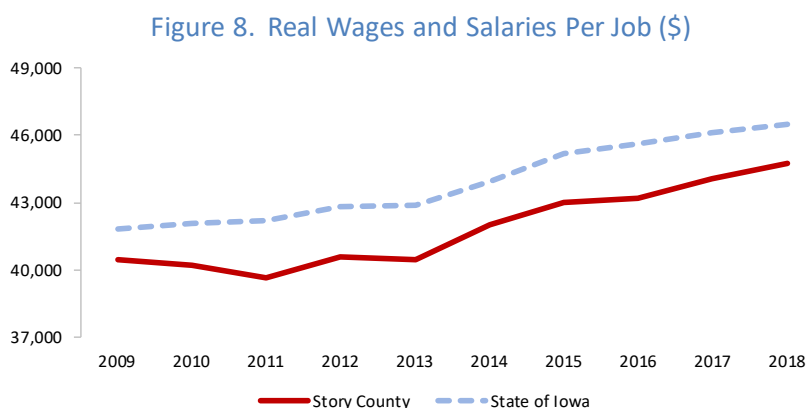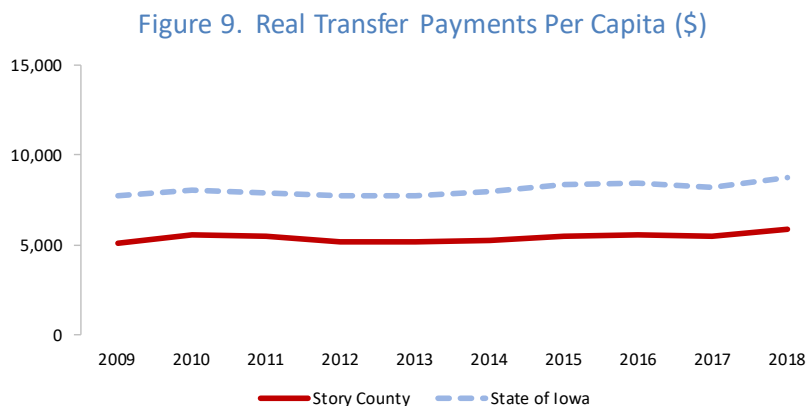### Figure 8. Real Wages and Salaries Per Job ($)

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.

Figure 9. Real Transfer Payments Per Capita ($)

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. Story County Income and Poverty

Median Household Income ($)	Story		State of Iowa
Estimate	57,464	<	60,071
90% Confidence Interval	53,250 - 61,670		59,230 - 60,920

Poverty Rate (%)	Story		State of Iowa
Estimate	18.9	>	11.2
90% Confidence Interval	17.4 - 20.4		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. Story County Age Distribution

Population (% of total)	Story		State of Iowa
Under 5 years	4.6%	<	6.3%
Age 5 to 17	12.0%	<	16.9%
Age 18 to 24	30.9%	>	10.1%
Age 65 years and over	12.0%	<	17.1%
Median age	26.3	>	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%
Group 3	Non-metro county whose largest city is between 2,500 to 9,999 in population	41	14.5%
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

| State of Iowa $12,730 | Group 1 Metro Core $14,820 | Group 2 Micro Core $11,880 | Group 3 Small Urban $9,140 | Group 4 Metro Outlying $6,980 | Group 5 Rural $6,680 |

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.

Figure 11. Expected and Actual Sales Per Capita ($)
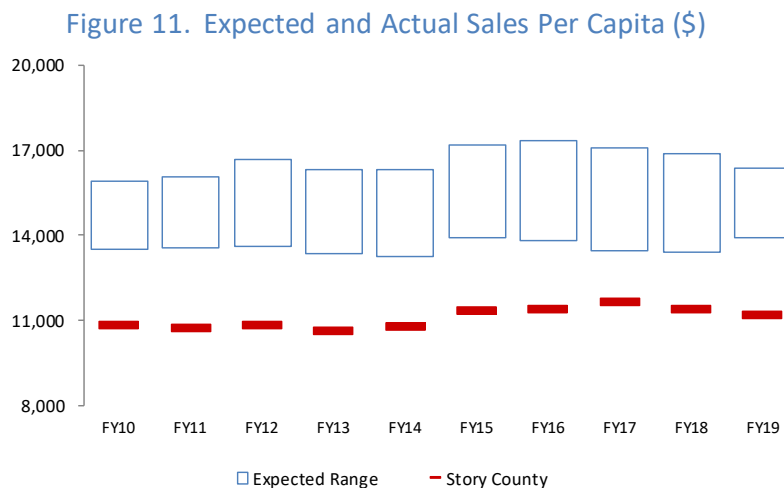
Peer Group Rankings

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	14,819
Story (#10/10 in peer group)	11,144
Peer Group Top 10	
Polk	17,957
Linn	17,499
Woodbury	16,613
Scott	15,691
Black Hawk	14,611
Dallas	14,202
Dubuque	13,934
Pottawattamie	13,929
Johnson	12,611
Story	11,144

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.
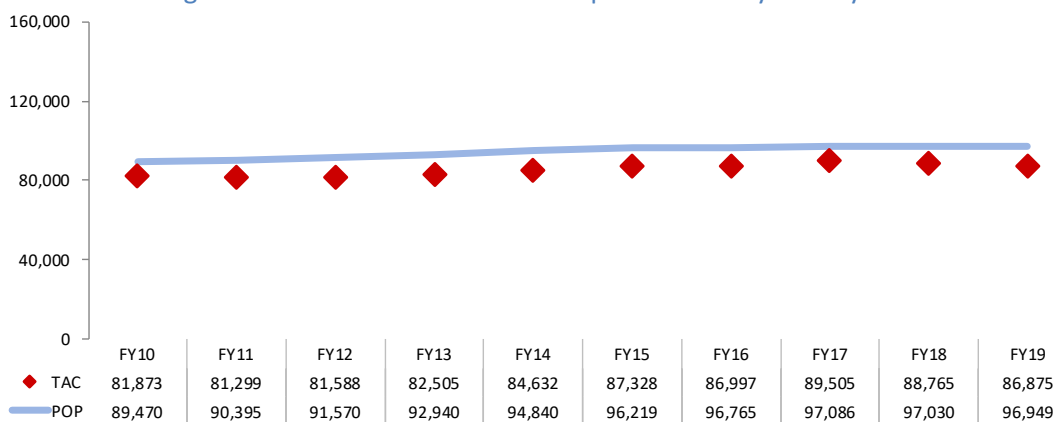
Table 7. Breakeven Analysis

Story County	FY2010	FY2011	FY2012	FY2013	FY2014	FY2015	FY2016	FY2017	FY2018	FY2019
Statewide average spending per person ($)	12,028	12,107	12,348	12,202	12,324	12,745	12,937	12,878	12,722	12,731
x local income adjustment	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
= Annual retail needs of local residents ($)	11,795	11,867	12,098	11,951	12,065	12,471	12,654	12,591	12,433	12,437
x County population estimate	89,470	90,395	91,570	92,940	94,840	96,219	96,765	97,086	97,030	96,949
Breakeven sales target ($ millions)	1,055.3	1,072.7	1,107.8	1,110.7	1,144.2	1,200.0	1,224.4	1,222.4	1,206.4	1,205.7
County actual sales ($ millions)	965.7	964.8	987.1	986.0	1,021.1	1,089.1	1,100.8	1,127.0	1,103.6	1,080.4
Estimated surplus (+) or leakage (-)	-89.6	-107.9	-120.8	-124.7	-123.2	-110.9	-123.6	-95.5	-102.8	-125.3

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 Story County

	FY10	FY11	FY12	FY13	FY14	FY15	FY16	FY17	FY18	FY19
◆ TAC	81,873	81,299	81,588	82,505	84,632	87,328	86,997	89,505	88,765	86,875
POP	89,470	90,395	91,570	92,940	94,840	96,219	96,765	97,086	97,030	96,949

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

	FY10	FY11	FY12	FY13	FY14	FY15	FY16	FY17	FY18	FY19
Peer Median	1.23	1.22	1.24	1.20	1.17	1.16	1.16	1.15	1.14	1.15
Story	0.92	0.90	0.89	0.89	0.89	0.91	0.90	0.92	0.91	0.90
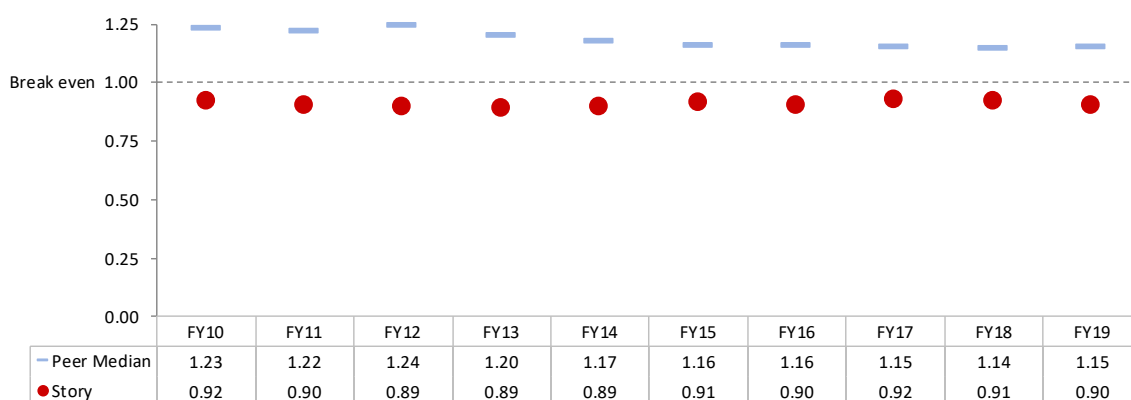
Interpreting Pull Factors

|	
= 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.

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
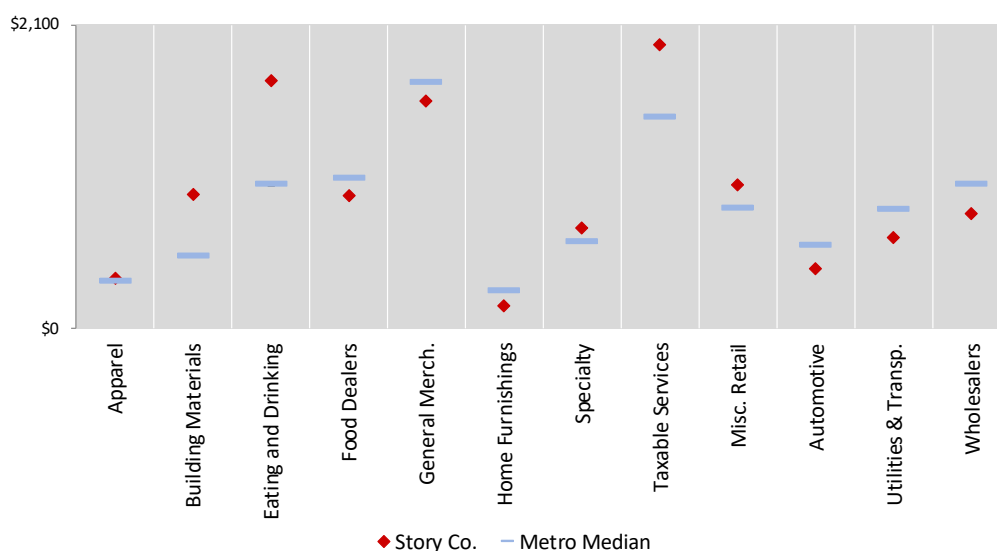
Retail Performance Measures (continued)

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. Story County Taxable Sales Summary by Business Group

Business Group Totals and Averages	Story County FY19 Totals		Average Sales Per Firm ($)	
Type of Firm	**Total Taxable Sales ($)**	**Reporting Firms**	**Story County**	**State of Iowa**
Apparel Stores	33,652,047	48	708,464	602,183
Building Materials Stores	90,267,893	30	3,034,215	2,140,463
Eating and Drinking Establishments	166,576,047	206	810,589	580,536
Food Stores (excluding non-taxable food items)	89,440,947	68	1,325,051	1,181,511
General Merchandise Stores	152,649,554	16	9,848,358	5,845,838
Home Furnishings Stores	15,117,573	26	575,908	880,390
Specialty Retail Stores	67,945,671	380	178,687	218,700
Service Establishments	190,431,746	731	260,598	179,277
Miscellaneous Retail Firms	96,113,414	288	333,727	269,736
Automotive and Related Stores	40,574,730	47	858,724	899,706
Utilities and Transportation Services	60,849,353	79	767,815	996,708
Retail Sales by Wholesale Firms	76,824,602	85	901,168	942,326

Per Capita Comparisons	Story County Averages ($)		FY19 Benchmark Values ($)	
	real average		**Metropolitan**	**State of**
Type of Firm	**FY16 - FY18**	**FY19**	**Median**	**Iowa**
Apparel Stores	382	347	326	313
Building Materials Stores	908	931	501	930
Eating and Drinking Establishments	1,702	1,718	992	1,436
Food Stores (excluding non-taxable food items)	945	923	1,037	1,154
General Merchandise Stores	1,611	1,575	1,696	1,464
Home Furnishings Stores	318	156	256	374
Specialty Retail Stores	736	701	599	979
Service Establishments	1,785	1,964	1,456	1,850
Miscellaneous Retail Firms	1,065	991	830	1,078
Automotive and Related Stores	404	419	571	649
Utilities and Transportation Services	711	628	825	1,261
Retail Sales by Wholesale Firms	885	792	992	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.
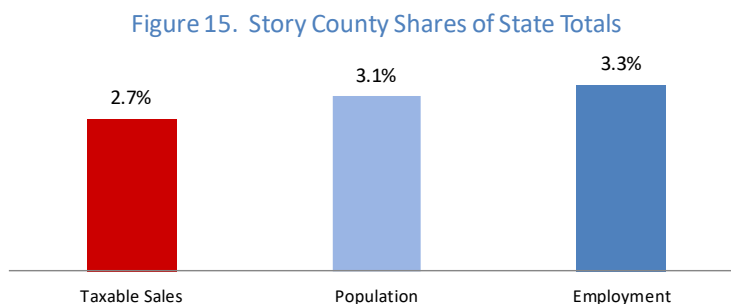
Figure 15. Story County Shares of State Totals

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 Story County

Area Name	Population	Average # Filers	Sales $millions
Story Total	**96,949**	**2,003**	**1,080.4**
Ames	66,130	1,229	932.8
Cambridge	799	25	2.3
Collins	469	19	0.6
Colo	825	38	6.2
Gilbert	1,144	36	5.4
Huxley	3,937	92	15.9
Kelley	299	19	1.2
Maxwell	907	36	3.1
Nevada	6,698	226	58.2
Roland	1,260	35	3.6
Slater	1,467	41	12.1
Story City	3,337	163	34.7
Zearing	522	23	1.6

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 ($)

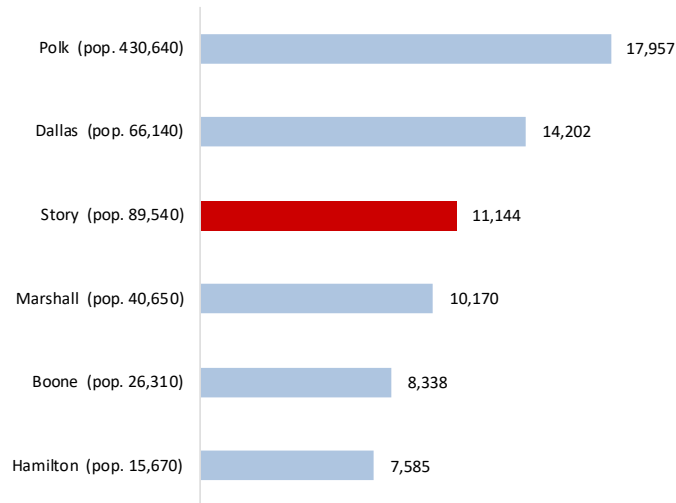| County	Per Capita Retail Sales ($)
Polk (pop. 430,640)	17,957
Dallas (pop. 66,140)	14,202
Story (pop. 89,540)	11,144
Marshall (pop. 40,650)	10,170
Boone (pop. 26,310)	8,338
Hamilton (pop. 15,670)	7,585

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

© 2020 Mapbox © OpenStreetMap

Below 0.5	0.5 to 0.9	0.9 to 1.1	1.1 or higher

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: Story County

- In-Commuters
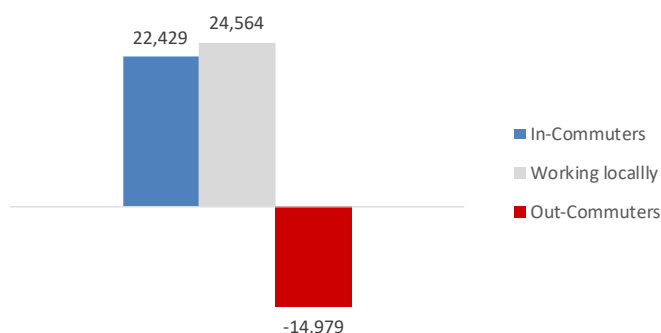- Working locallly
- Out-Commuters

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. Story County Commuting Probabilities

	Number	% of total	Peer average
Workplaces of Story County residents:			
Working within the county	24,564	62.1%	68.3%
Working elsewhere:	14,979	37.9%	31.7%
in Polk Co.	7,004	17.7%	
in all other areas	7,975	20.2%	
Sources for Story County workers:			
Living within the county	24,564	52.3%	58.9%
Commuting from elsewhere:	22,429	47.7%	41.1%
from Polk Co.	5,072	10.8%	
from all other areas	17,357	36.9%	

Data Notes

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 1st 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
Apparel Group				
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
Building Materials Group				
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
Eating and Drinking Group				
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
Food Dealers Group				
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
General Merchandise Group				
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
Home Furnishings And Appliances Group				
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
Miscellaneous Group				
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
Motor Vehicle Group				
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
Services Group				
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
Specialty Retail Stores Group				
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
Utilities and Transportation Group				
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
Wholesale Goods Group				
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
State Totals	342,675	100.0	$40,127,136,504	$12,731

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

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

**Iowa State University
Department of Economics**

For more information about this report, please contact:

Liesl Eathington
175 Heady Hall
Iowa State University
Ames, Iowa 50011

Phone: 515-294-2954
E-mail: leathing@iastate.edu

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

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