

# Retail Trade Analysis Fiscal Year 2019

## Washington 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. Washington County Key Retail Indicators

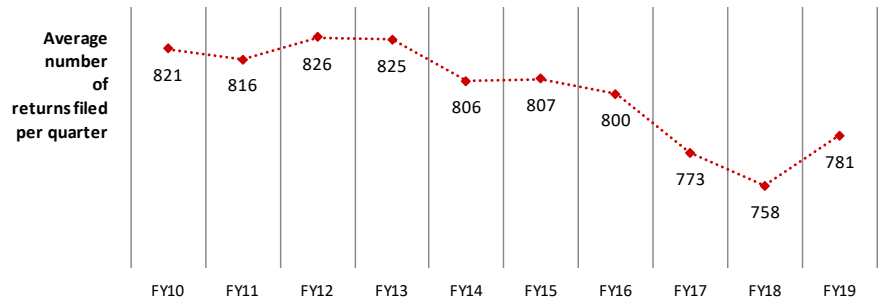
	FY2018	FY2019	% Change
Real total taxable sales (\$)	205,804,814	200,621,261	-2.5% ▼
Number of reporting firms (annualized)	758	781	3.0% ▲
Population	22,131	22,012	-0.5% ►
Average sales per capita (\$)	9,299	9,114	-2.0% ▼
Average sales per firm (\$)	271,421	256,795	-5.4% ▼

*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

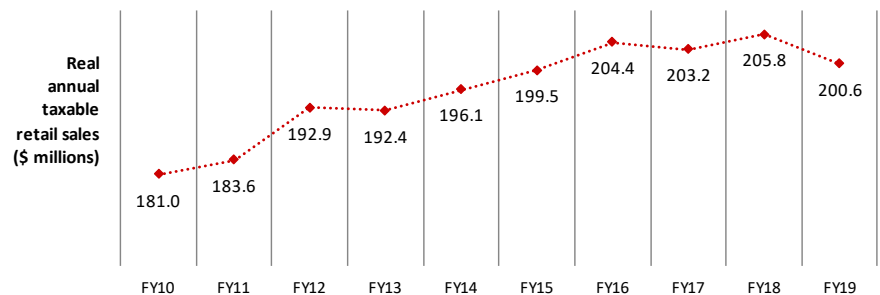
**Figure 1** shows the average number of business establishments filing sales tax returns during the year, serving as a rough estimate for the number of local retail establishments.

**Figure 1. Number of Reporting Establishments**



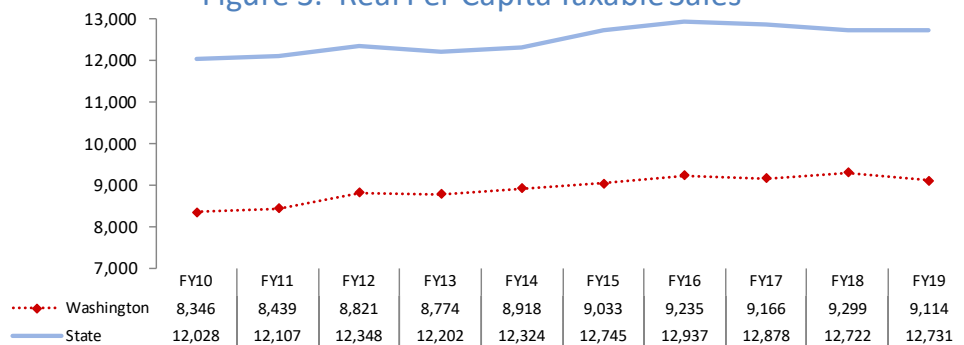
**Figure 2** shows the total real, or inflation-adjusted, value of taxable retail sales reported by local businesses.

**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 Washington 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	727	62,343,043	231,893,227	318,973	11,836	389,965	11,069
1977	737	70,674,566	248,545,881	337,126	12,512	402,043	11,721
1978	765	74,460,675	245,565,075	320,895	12,235	396,235	11,985
1979	781	82,222,260	251,677,577	322,457	12,441	401,923	12,523
1980	772	88,182,716	244,783,144	317,282	12,090	394,146	12,485
1981	782	84,782,755	213,526,339	273,052	10,585	350,472	11,327
1982	778	86,440,412	203,476,947	261,454	10,111	336,721	10,893
1983	806	91,764,457	206,009,477	255,754	10,320	327,385	10,769
1984	820	86,879,479	187,490,749	228,647	9,453	320,763	10,683
1985	827	88,034,019	183,540,382	222,069	9,276	317,278	10,660
1986	837	85,998,073	174,041,560	207,873	8,838	311,144	10,648
1987	819	89,930,145	178,148,616	217,520	9,104	329,120	11,110
1988	806	91,975,992	175,777,892	218,154	8,979	330,896	11,178
1989	814	87,828,134	160,750,371	197,482	8,196	336,241	11,275
1990	818	90,647,928	159,478,739	194,902	8,135	340,333	11,379
1991	797	98,229,437	165,645,353	207,836	8,399	341,663	11,308
1992	778	99,698,783	163,661,200	210,429	8,204	342,012	11,402
1993	794	101,636,828	162,544,662	204,652	8,093	342,314	11,543
1994	813	105,080,934	164,469,301	202,237	8,195	349,574	11,793
1995	823	102,606,502	157,107,493	190,896	7,800	356,788	12,029
1996	844	105,901,050	158,977,131	188,306	7,833	357,708	12,294
1997	860	111,773,657	164,298,649	191,100	8,042	376,016	12,495
1998	865	111,302,487	161,774,966	187,023	7,888	378,426	12,710
1999	860	120,095,122	172,838,963	201,092	8,414	404,875	13,239
2000	840	122,656,441	172,851,122	205,898	8,371	412,564	13,298
2001	849	121,015,991	166,516,551	196,075	7,971	413,506	13,339
2002	820	119,952,967	163,060,848	198,976	7,733	415,051	13,184
2003	761	123,987,382	165,427,283	217,381	7,822	433,650	13,035
2004	725	125,746,502	164,404,257	226,921	7,746	441,149	12,906
2005	715	122,006,183	155,400,376	217,419	7,294	439,335	12,830
2006	710	124,380,009	153,668,763	216,511	7,177	450,918	12,925
2007	763	140,694,658	169,849,562	222,608	7,889	442,237	12,773
2008	784	147,940,077	173,305,519	221,194	8,010	442,954	12,887
2009	815	159,220,294	184,411,926	226,411	8,503	434,644	12,850
2010	821	158,053,156	181,023,022	220,625	8,346	417,088	12,028
2011	816	163,144,022	183,594,139	224,924	8,439	432,600	12,107
2012	826	175,637,849	192,851,369	233,618	8,821	441,036	12,348
2013	825	177,852,368	192,358,924	233,162	8,774	435,402	12,202
2014	806	183,916,833	196,085,728	243,207	8,918	452,587	12,324
2015	807	188,573,331	199,508,610	247,146	9,033	471,222	12,745
2016	800	194,213,035	204,436,528	255,626	9,235	478,872	12,937
2017	773	195,949,982	203,171,092	263,005	9,166	478,871	12,878
2018	758	202,293,693	205,804,814	271,421	9,299	475,534	12,722
2019	781	200,621,261	200,621,261	256,795	9,114	468,399	12,731

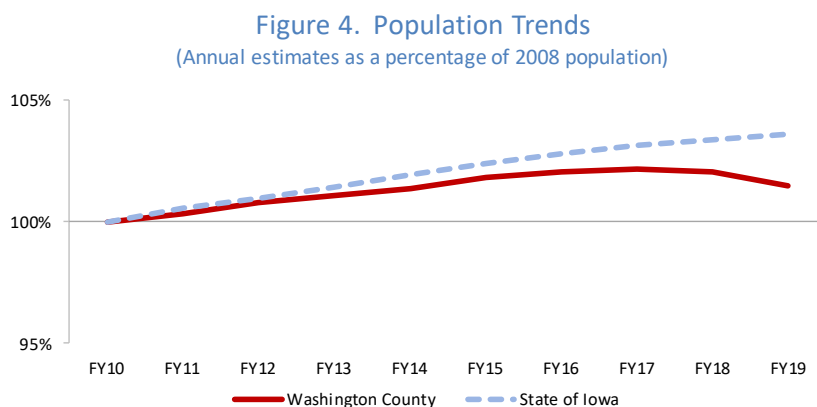
# Local Economic Trends

## Population

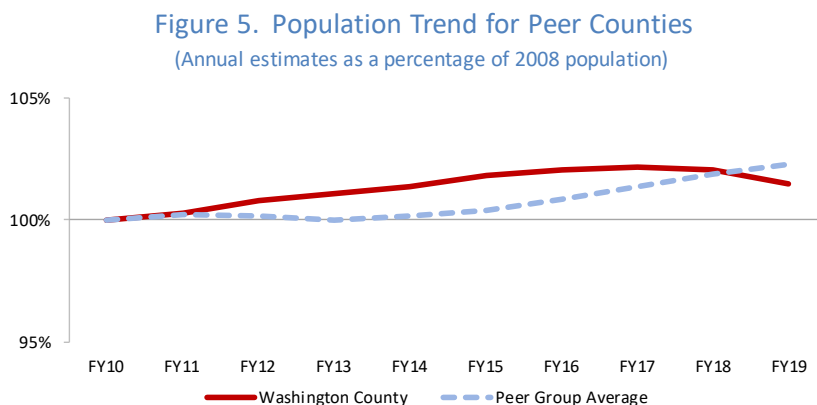
Population change is a key factor influencing local retail sales performance. Population gains or losses from year to year directly impact the number of potential shoppers in the region.

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.



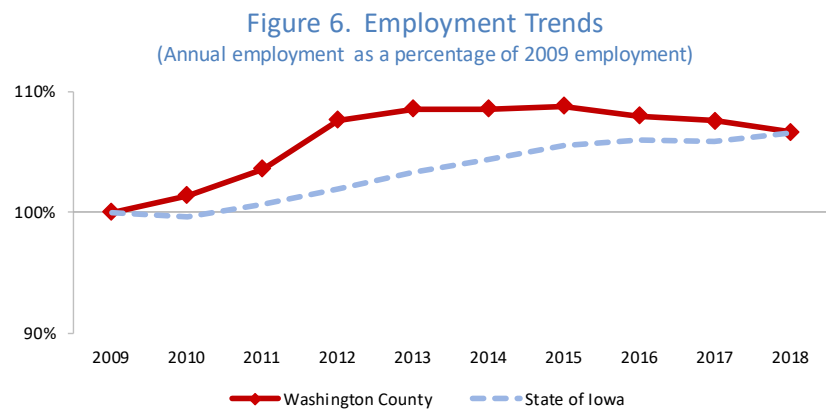
## Local Economic Trends (continued)

### Employment

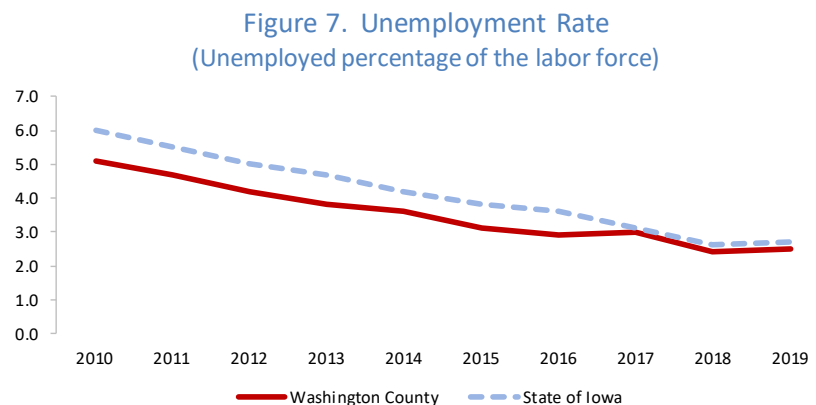
Area job growth creates earnings opportunities for current residents and also helps to attract new residents to the region. Conversely, lagging employment growth rates may indicate a decline in the region's competitive strength. Figure 6 shows recent county and state employment trends

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 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.



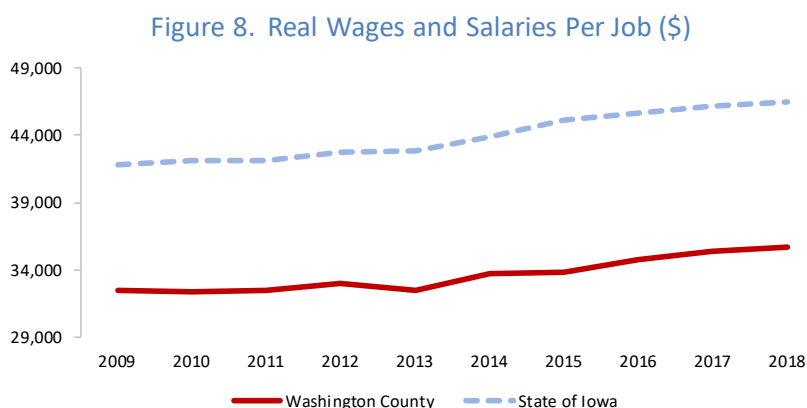
## Local Economic Trends (continued)

### Personal Income

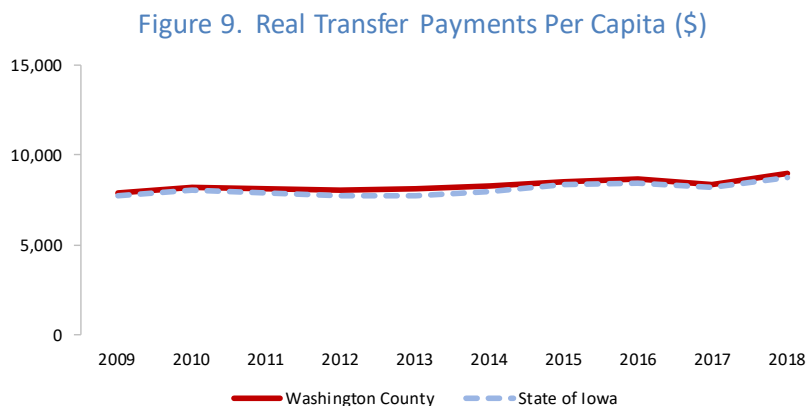
Local income levels influence the amounts and types of retail goods and services that area residents demand. Wages and salaries typically comprise the largest portion of local personal income. Other major sources include proprietors' income, investment income, and transfer payments from governments.

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. Washington County Income and Poverty**

Median Household Income (\$)	Washington	State of Iowa
Estimate	65,849 >	60,071
90% Confidence Interval	61,960 - 69,740	59,230 - 60,920

Poverty Rate (%)	Washington	State of Iowa
Estimate	8.8 <	11.2
90% Confidence Interval	6.9 - 10.7	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. Washington County Age Distribution**

Population (% of total)	Washington	State of Iowa
Under 5 years	6.9% >	6.3%
Age 5 to 17	17.9% >	16.9%
Age 18 to 24	7.3% <	10.1%
Age 65 years and over	19.3% >	17.1%
Median age	40.4 >	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



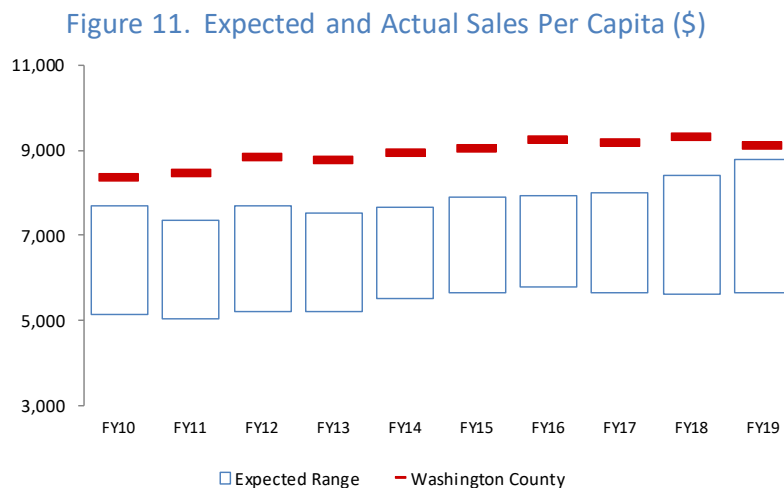


## Retail Performance Measures (continued)

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	6,985
Washington ( #1/11 in peer group)	9,114
<i>Peer Group Top 10</i>	
Washington	9,114
Plymouth	8,935
Bremer	8,800
Jones	8,777
Madison	6,802
Warren	6,735
Guthrie	5,865
Grundy	5,719
Mills	5,605
Benton	5,327

## 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.

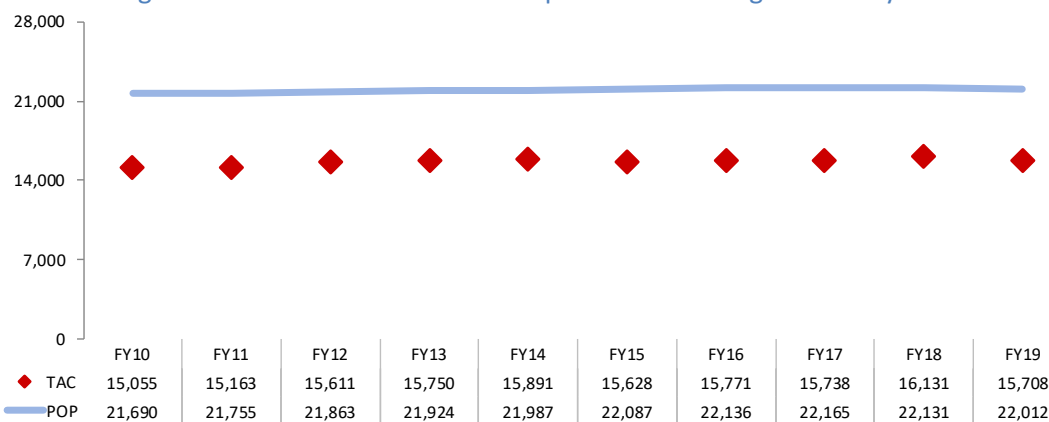
Table 7. Breakeven Analysis

Washington 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>	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
= Annual retail needs of local residents (\$)	12,024	12,108	12,354	12,213	12,340	12,766	12,963	12,910	12,758	12,772
<i>x County population estimate</i>	21,690	21,755	21,863	21,924	21,987	22,087	22,136	22,165	22,131	22,012
Breakeven sales target (\$ millions)	260.8	263.4	270.1	267.8	271.3	282.0	286.9	286.1	282.4	281.1
County actual sales (\$ millions)	181.0	183.6	192.9	192.4	196.1	199.5	204.4	203.2	205.8	200.6
Estimated surplus (+) or leakage (-)	-79.8	-79.8	-77.2	-75.4	-75.2	-82.5	-82.5	-83.0	-76.5	-80.5

### 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 Washington County



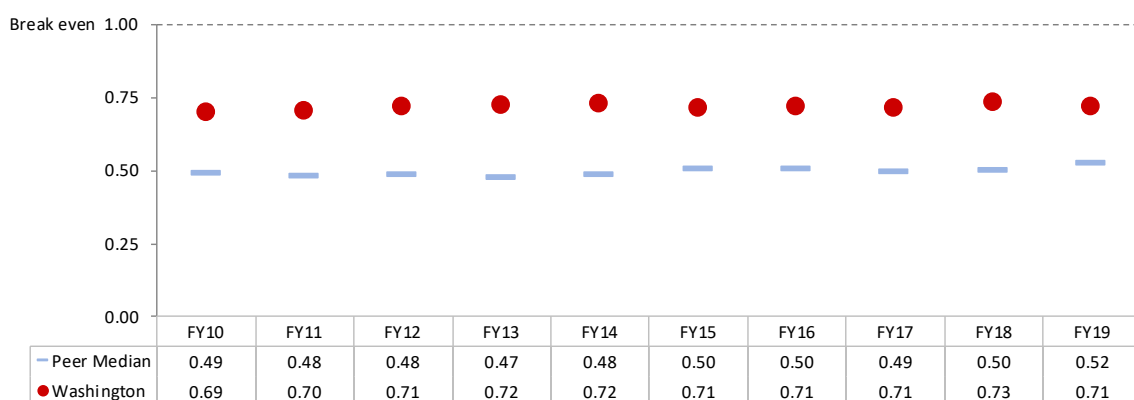
# Retail Performance Measures (continued)

## 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

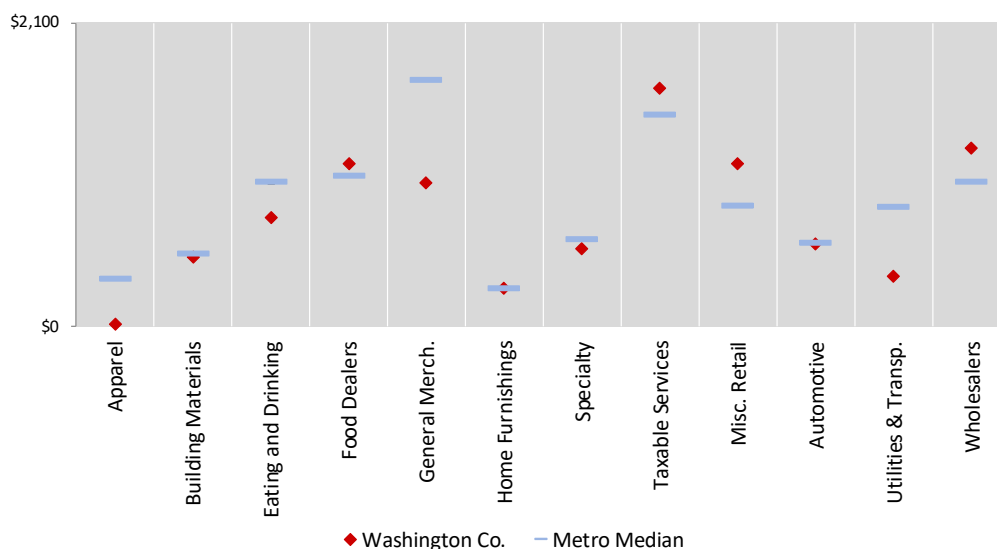
Areas of strength or weakness in the local retail sector may be evident from the sales levels in specific types of businesses. This section examines county-level sales across 12 broad categories of retail firms (see Table 11 on Pages 21-22 for business group definitions).

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. Washington County Taxable Sales Summary by Business Group**

Business Group Totals and Averages	Washington County FY19 Totals		Average Sales Per Firm (\$)	
	Total Taxable Sales (\$)	Reporting Firms	Washington County	State of Iowa
Type of Firm				
Apparel Stores	493,214	8	63,641	602,183
Building Materials Stores	10,545,810	13	811,216	2,140,463
Eating and Drinking Establishments	16,549,182	42	391,697	580,536
Food Stores (excluding non-taxable food items)	24,789,606	29	862,247	1,181,511
General Merchandise Stores	21,952,263	5	4,390,453	5,845,838
Home Furnishings Stores	5,793,578	13	454,398	880,390
Specialty Retail Stores	11,864,759	145	81,685	218,700
Service Establishments	36,337,536	302	120,323	179,277
Miscellaneous Retail Firms	24,757,396	132	188,269	269,736
Automotive and Related Stores	12,662,148	19	684,440	899,706
Utilities and Transportation Services	7,685,398	28	272,049	996,708
Retail Sales by Wholesale Firms	27,190,371	46	587,900	942,326

Per Capita Comparisons	Washington County Averages (\$)		FY19 Benchmark Values (\$)	
	real average FY16 - FY18	FY19	Metropolitan Median	State of Iowa
Type of Firm				
Apparel Stores		22	326	313
Building Materials Stores	504	479	501	930
Eating and Drinking Establishments	775	752	992	1,436
Food Stores (excluding non-taxable food items)	1,131	1,126	1,037	1,154
General Merchandise Stores		997	1,696	1,464
Home Furnishings Stores	237	263	256	374
Specialty Retail Stores	568	539	599	979
Service Establishments	1,769	1,651	1,456	1,850
Miscellaneous Retail Firms	1,239	1,125	830	1,078
Automotive and Related Stores	533	575	571	649
Utilities and Transportation Services	315	349	825	1,261
Retail Sales by Wholesale Firms	1,140	1,235	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.

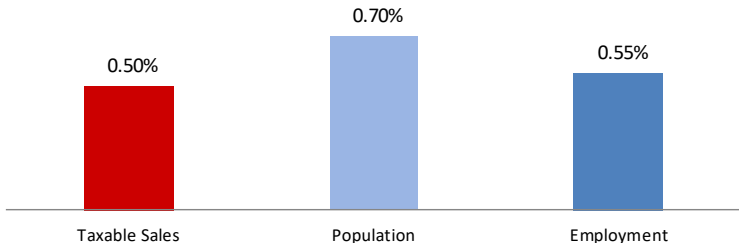
## Regional Competition

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. Washington 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 Washington County

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## Regional Competition (continued)

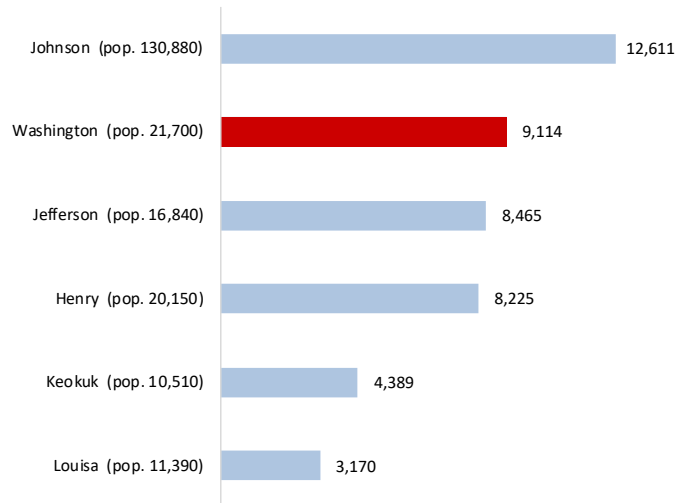
### Neighboring Area Sales

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)

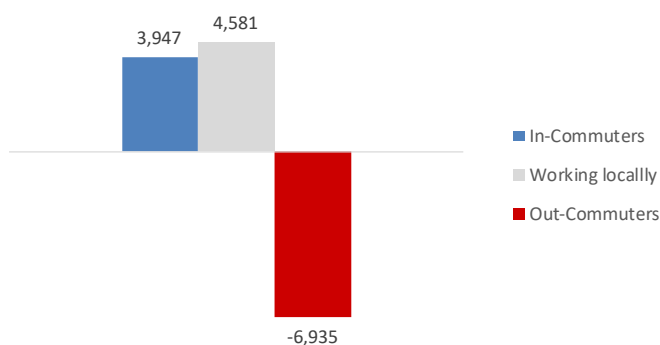
### Commuting Patterns

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: Washington 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. Washington County Commuting Probabilities**

	Number	% of total	Peer average
<b>Workplaces of Washington County residents:</b>			
Working within the county	4,581	39.8%	31.4%
Working elsewhere:	6,935	60.2%	68.6%
in Johnson Co.	3,007	26.1%	
in all other areas	3,928	34.1%	
<b>Sources for Washington County workers:</b>			
Living within the county	4,581	53.7%	52.3%
Commuting from elsewhere:	3,947	46.3%	47.7%
from Johnson Co.	883	10.4%	
from all other areas	3,064	35.9%	



## 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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## 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.

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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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