CITY TRADE PULL FACTORS

Annual report for Fiscal Year 2019
(July 2018 through June 2019)

Kansas Department of Revenue
Office of Research and Analysis
Issued December 2019

Introduction

The City Trade Pull Factor report provides different measures of retail market data for selected cities for fiscal year 2019, which represents the period July 1, 2018 through June 30, 2019.

The Department of Revenue employs the following retail market measures.

1. City Trade Pull Factor (CiTPF)
The first measure is a quotient of retail trade captured by the city compared to the state, called *the City Trade Pull Factor* (CiTPF). The City Trade Pull Factor is computed by dividing the per capita sales tax of a city by the statewide per capita sales tax.[1] CiTPF values greater than 1.00 indicates that local businesses are pulling in trade from beyond their home city border. A CiTPF value less than 1.00 indicates more trade is being lost than pulled in, that residents are shopping outside the city. This is a simple and well-known measure of the relative strength of the retail business community.

2. Income-Adjusted City Trade Pull Factor (IA-CiTPF)
The CiTPF is not adjusted for differing income levels in each business community. The Department of Revenue also provides a variation of the Trade Pull Factor, *the Income-Adjusted City Trade Pull Factor* (IA-CiTPF). The formula of this measure is given as follows:

$$\text{IA-CiTPF} = \text{CiTPF x } \frac{State's\ per\ capita\ Income}{City's\ per\ capita\ Income}$$

Any pull factor computed for a certain period of time must be treated carefully because it is subject to temporary distortions of the local economy. Lloyd (1995) suggests that local government practitioners should utilize information over the long-span by calculating trade pull factors for each year and looking for long-term trends. Lloyd notes "[p]ull factors increasing over time would indicate that the local area is becoming more efficient at competing for local retail sales. Decreasing pull factors would indicate that the local business community is losing sales to outside areas."

3. Trade Area Capture (TAC)
The *Trade Area Capture* (TAC) of a city is a measure of the customer base served by a community. It is calculated by multiplying the city's population by the CiTPF.

4. Market Share (MS)
The *Market Share* (MS) is the percent the city's Trade Area Capture is of the state as a whole. MS is calculated by dividing the city's TAC by the statewide population.

5. Percent of County Trade (PCT)
The *Percent of County Trade (PCT) is* a concentration factor that shows the percent capture of retail trade of the city within its county.

[1] Sales tax denotes statewide sales tax. In fiscal year 2019, the statewide sales tax rate was 6.50%.

For historical data, please refer to the previous reports. Prior year reports and other community-related reports can be found at the Department of Revenue's web site.

The FY 2019 report consists of two tables.

- Table 1 list the FY 2019 measures for 100 cities in the state ranked by population.
- Table 2 lists cities with a percent of county trade of 65% or higher.

Policy Implications

In 2003 the Kansas Legislature passed a law that placed Kansas in conformity with the Streamlined Sales Tax Agreement. This legislation required destination sourcing, under which retail businesses must collect sales tax based on the local rates in effect at the place where the customer takes delivery of a purchase. Vehicle purchases are excluded from the destination sourcing requirement. Prior to the change, only telecommunications and utility sales were taxed in this manner. Full reporting of destination sourcing was not required until January 2005.

Destination sourcing results in charging the sales tax rate based on where delivery occurs and in some industries, this impacts how sales are recorded. For instance with furniture retailers, if the furniture is delivered to the purchaser's home, the sale is recorded as occurring at the taxing jurisdiction of the purchaser. The primary types of retailers affected by destination sourcing are furniture dealers, home improvement (lumber) stores, household and electronic appliance dealers, and certain repair service providers.

Destination sourcing affects the city trade pull factor because the measure is based on sales tax collections. Previously, all sales of a retailer were recorded based on the business location. With destination sourcing, sales that are delivered are recorded where the delivery occurred. If the sale were into a neighboring community, it would be recorded as such – resulting in a loss of sales tax collections in the city where the store is located. With a few exceptions, the overall impact of destination sourcing on most cities' total sales tax collections has not been significant, so determining if a change in a city's sales tax collections is a direct result of destination sourcing is challenging. Based on the changes seen in the historical data, many regional shopping areas' pull factors were staying constant or slightly decreasing. Likewise, smaller cities' pull factors showed slight increases. This ongoing shift in the measures since destination sourcing was enacted is anticipated to continue with the growth of Internet shopping and the delivery of goods to the purchaser's address.

Data Sources

The data used in this report consists of city's per capita income, city population, and state sales tax collections. Data on estimated per capita income (2013-2017) comes from US Census Bureau Quick Facts report. City populations are from the U.S. Census Bureau as

certified by the Division of the Budget July 1, 2019 and published as the official population reports for the state of Kansas, adjusted to remove the prison population, since this population does not trade within the retail community. State and federal prison population figures were obtained from the Kansas Department of Corrections and the Federal Bureau of Prisons and were deducted from the city and county totals.

State sales tax collections are generated by the Department of Revenue from sales tax returns filed by the state's retailers. Sales tax reports issued by the Department are available at http://www.ksrevenue.org.

References

1. Lloyd, M., 1995, "Measuring Local Economic Development with Pull Factors," *Journal of Extension Vol.33*, Extension Journal, Inc.
2. US Census Bureau, US Census, <http://www.census.gov>.
3. Kansas Department of Revenue, *Pull Factor Reports*, <http://www.ksrevenue.org>.
4. Kansas Department of Corrections, *Population Report,* <https://www.doc.ks.gov/>.
5. Federal Bureau of Prisons, *USP Leavenworth,* <https://www.bop.gov/>.

Table 1
FY 2019 City Trade Pull Factors
Top 100 cities by population

	FY 2019 State Sales Tax Collections	Adjusted Population CY 2018	Sales per Capita	Pull Factor	Income-Adjusted Pull Factor*	Trade Area Capture	Market Share	Percent of County Trade
Wichita	$ 402,558,235	389,013	$ 1,034.82	1.09	1.21	422,350	14.6%	71.9%
Overland Park	$ 251,539,635	192,536	$ 1,306.46	1.37	0.92	263,907	9.1%	34.4%
Kansas City	$ 138,167,307	152,958	$ 903.30	0.95	1.41	144,960	5.0%	90.9%
Olathe	$ 161,774,916	139,605	$ 1,158.80	1.22	1.04	169,729	5.9%	22.2%
Topeka	$ 161,417,963	124,819	$ 1,293.22	1.36	1.54	169,354	5.8%	90.8%
Lawrence	$ 100,852,440	97,286	$ 1,036.66	1.09	1.14	105,811	3.6%	93.5%
Shawnee	$ 61,727,258	65,845	$ 937.46	0.98	0.76	64,762	2.2%	8.5%
Lenexa	$ 81,995,531	55,294	$ 1,482.90	1.56	1.10	86,027	3.0%	11.2%
Manhattan	$ 69,140,638	54,959	$ 1,258.04	1.32	1.45	72,540	2.5%	**
Salina	$ 65,305,186	46,716	$ 1,397.92	1.47	1.62	68,516	2.4%	96.1%
Hutchinson	$ 46,126,452	38,764	$ 1,189.93	1.25	1.50	48,394	1.7%	83.1%
Leawood	$ 44,021,401	34,689	$ 1,269.03	1.33	0.47	46,186	1.6%	6.0%
Leavenworth	$ 28,794,028	34,323	$ 838.91	0.88	0.99	30,210	1.0%	66.6%
Dodge City	$ 29,412,973	27,329	$ 1,076.26	1.13	1.69	30,859	1.1%	91.7%
Garden City	$ 42,558,923	26,546	$ 1,603.21	1.68	2.19	44,651	1.5%	86.5%
Emporia	$ 27,132,749	24,765	$ 1,095.61	1.15	1.54	28,467	1.0%	92.8%
Derby	$ 30,722,213	24,721	$ 1,242.76	1.30	1.14	32,233	1.1%	5.5%
Prairie Village	$ 14,580,613	22,389	$ 651.24	0.68	0.41	15,297	0.5%	2.0%
Junction City	$ 22,088,870	22,120	$ 998.59	1.05	1.37	23,175	0.8%	85.3%
Gardner	$ 14,527,949	21,871	$ 664.26	0.70	0.74	15,242	0.5%	2.0%
Hays	$ 33,438,320	20,852	$ 1,603.60	1.68	1.70	35,082	1.2%	84.5%
Pittsburg	$ 21,801,761	20,178	$ 1,080.47	1.13	1.86	22,874	0.8%	71.3%
Liberal	$ 21,316,875	19,495	$ 1,093.45	1.15	1.64	22,365	0.8%	94.1%
Newton	$ 15,990,830	18,746	$ 853.03	0.89	1.02	16,777	0.6%	66.9%
Great Bend	$ 21,346,261	15,170	$ 1,407.14	1.48	1.72	22,396	0.8%	76.2%
McPherson	$ 18,819,312	13,077	$ 1,439.1	1.51	1.48	19,745	0.7%	63.2%
Andover	$ 11,523,736	13,278	$ 867.9	0.91	0.75	12,090	0.4%	25.0%
Ottawa	$ 14,978,192	12,267	$ 1,221.0	1.28	1.68	15,715	0.5%	80.1%
Arkansas City	$ 9,843,552	11,793	$ 834.7	0.88	1.27	10,328	0.4%	43.6%
Winfield	$ 9,387,462	11,507	$ 815.8	0.86	1.21	9,849	0.3%	41.6%
Haysville	$ 3,828,860	11,264	$ 339.9	0.36	0.48	4,017	0.1%	0.7%
El Dorado	$ 13,729,812	11,228	$ 1,222.8	1.28	1.55	14,405	0.5%	29.8%
Merriam	$ 47,996,562	11,178	$ 4,293.8	4.50	4.15	50,356	1.7%	6.6%
Atchison	$ 9,483,883	10,560	$ 898.1	0.94	1.14	9,950	0.3%	87.9%
Lansing	$ 4,860,017	10,031	$ 484.5	0.51	0.47	5,099	0.2%	11.2%
Parsons	$ 9,713,216	9,665	$ 1,005.0	1.05	1.48	10,191	0.4%	75.1%
Mission	$ 15,558,279	9,373	$ 1,659.9	1.74	1.46	16,323	0.6%	2.1%
Coffeyville	$ 8,463,515	9,366	$ 903.6	0.95	1.28	8,880	0.3%	35.4%
Augusta	$ 6,491,666	9,342	$ 694.9	0.73	0.93	6,811	0.2%	14.1%
Chanute	$ 10,574,046	9,018	$ 1,172.5	1.23	1.76	11,094	0.4%	82.9%
Independence	$ 10,906,763	8,598	$ 1,268.5	1.33	1.93	11,443	0.4%	45.6%
Bel Aire	$ 907,216	8,073	$ 112.4	0.12	0.09	952	0.0%	0.2%
Bonner Springs	$ 11,291,471	7,804	$ 1,446.9	1.52	1.78	11,847	0.4%	**
Fort Scott	$ 8,511,184	7,765	$ 1,096.1	1.15	1.88	8,930	0.3%	87.6%
Wellington	$ 6,929,856	7,748	$ 894.4	0.94	1.23	7,271	0.3%	51.8%
Park City	$ 7,695,968	7,730	$ 995.6	1.04	1.15	8,074	0.3%	1.4%
Valley Center	$ 1,765,481	7,313	$ 241.4	0.25	0.23	1,852	0.1%	0.3%
Spring Hill	$ 3,817,803	6,967	$ 548.0	0.57	0.63	4,006	0.1%	**
Roeland Park	$ 8,409,791	6,758	$ 1,244.4	1.31	1.11	8,823	0.3%	1.2%
Pratt	$ 9,209,631	6,630	$ 1,389.1	1.46	1.78	9,662	0.3%	83.2%
De Soto	$ 2,858,865	6,443	$ 443.7	0.47	0.44	2,999	0.1%	**
Mulvane	$ 1,733,263	5,427	$ 319.4	0.34	0.34	1,818	0.1%	0.3%
Eudora	$ 1,880,971	6,384	$ 294.6	0.31	0.32	1,973	0.1%	1.7%
Abilene	$ 7,245,388	6,300	$ 1,150.1	1.21	1.43	7,602	0.3%	61.0%
Basehor	$ 2,623,244	6,194	$ 423.5	0.44	0.39	2,752	0.1%	6.1%
Ulysses	$ 3,855,679	5,756	$ 669.9	0.70	0.79	4,045	0.1%	71.9%
Paola	$ 8,771,961	5,670	$ 1,547.1	1.62	1.91	9,203	0.3%	41.3%
Tonganoxie	$ 2,515,208	5,524	$ 455.3	0.48	0.45	2,639	0.1%	5.8%
Colby	$ 11,396,640	5,317	$ 2,143.4	2.25	2.83	11,957	0.4%	76.2%
Iola	$ 8,212,775	5,312	$ 1,546.1	1.62	2.29	8,617	0.3%	67.2%
Concordia	$ 6,704,662	4,956	$ 1,352.8	1.42	1.72	7,034	0.2%	83.1%
Wamego	$ 3,743,900	4,762	$ 786.2	0.82	n/a	3,928	0.1%	11.5%
Goddard	$ 5,492,352	4,724	$ 1,162.6	1.22	n/a	5,762	0.2%	1.0%
Baldwin City	$ 2,132,342	4,691	$ 454.6	0.48	n/a	2,237	0.1%	2.0%

Table 1
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	FY 2019 State Sales Tax Collections	Adjusted Population CY 2018	Sales per Capita	Pull Factor	Income-Adjusted Pull Factor*	Trade Area Capture	Market Share	Percent of County Trade
Maize	$ 1,565,732	4,662	$ 335.8	0.35	n/a	1,643	0.1%	0.3%
Louisburg	$ 5,627,218	4,508	$ 1,248.3	1.31	n/a	5,904	0.2%	26.5%
Edwardsville	$ 2,339,472	4,494	$ 520.6	0.55	n/a	2,454	0.1%	1.5%
Russell	$ 2,594,176	4,463	$ 581.3	0.61	n/a	2,722	0.1%	36.7%
Goodland	$ 6,446,866	4,386	$ 1,469.9	1.54	n/a	6,764	0.2%	93.2%
Osawatomie	$ 1,418,579	4,266	$ 332.5	0.35	n/a	1,488	0.1%	6.7%
Clay Center	$ 4,581,734	3,989	$ 1,148.6	1.21	n/a	4,807	0.2%	78.4%
Fairway	$ 2,188,545	3,966	$ 551.8	0.58	n/a	2,296	0.1%	0.3%
Rose Hill	$ 1,269,858	3,965	$ 320.3	0.34	n/a	1,332	0.0%	2.8%
Baxter Springs	$ 1,861,095	3,944	$ 471.9	0.50	n/a	1,953	0.1%	25.4%
Scott City	$ 3,735,385	3,803	$ 982.2	1.03	n/a	3,919	0.1%	81.6%
Hugoton	$ 2,580,729	3,794	$ 680.2	0.71	n/a	2,708	0.1%	71.2%
Hesston	$ 1,496,221	3,734	$ 400.7	0.42	n/a	1,570	0.1%	6.3%
Beloit	$ 4,470,427	3,726	$ 1,199.8	1.26	n/a	4,690	0.2%	77.4%
Mission Hills	$ 3,539,650	3,576	$ 989.8	1.04	n/a	3,714	0.1%	0.5%
Lyons	$ 2,009,696	3,511	$ 572.4	0.60	n/a	2,109	0.1%	33.2%
Frontenac	$ 2,548,132	3,410	$ 747.3	0.78	n/a	2,673	0.1%	8.3%
Lindsborg	$ 1,752,764	3,288	$ 533.1	0.56	n/a	1,839	0.1%	5.9%
Marysville	$ 5,297,275	3,268	$ 1,621.0	1.70	n/a	5,558	0.2%	62.0%
Garnett	$ 3,011,619	3,262	$ 923.2	0.97	n/a	3,160	0.1%	62.9%
Holton	$ 5,594,016	3,248	$ 1,722.3	1.81	n/a	5,869	0.2%	75.3%
Larned	$ 3,026,119	3,175	$ 953.1	1.00	n/a	3,175	0.1%	79.7%
Hiawatha	$ 4,366,856	3,134	$ 1,393.4	1.46	n/a	4,582	0.2%	61.7%
Columbus	$ 2,755,707	3,070	$ 897.6	0.94	n/a	2,891	0.1%	37.6%
Kingman	$ 2,483,068	2,906	$ 854.5	0.90	n/a	2,605	0.1%	56.7%
Galena	$ 1,087,796	2,875	$ 378.4	0.40	n/a	1,141	0.0%	14.9%
Hillsboro	$ 2,340,443	2,834	$ 825.8	0.87	n/a	2,456	0.1%	38.2%
Osage City	$ 1,898,075	2,821	$ 672.8	0.71	n/a	1,991	0.1%	33.2%
Girard	$ 1,451,628	2,702	$ 537.2	0.56	n/a	1,523	0.1%	4.8%
St. Marys	$ 1,843,892	2,636	$ 699.5	0.73	n/a	1,935	0.1%	5.7%
Sabetha	$ 2,589,747	2,568	$ 1,008.5	1.06	n/a	2,717	0.1% **	
Burlington	$ 2,849,029	2,558	$ 1,113.8	1.17	n/a	2,989	0.1%	40.7%
Clearwater	$ 709,347	2,543	$ 278.9	0.29	n/a	744	0.0%	0.1%
Hoisington	$ 1,479,877	2,510	$ 589.6	0.62	n/a	1,553	0.1%	5.3%
South Hutchinson	$ 2,263,972	2,503	$ 904.5	0.95	n/a	2,375	0.1%	4.1%
Phillipsburg	$ 2,529,099	2,486	$ 1,017.3	1.07	n/a	2,653	0.1%	70.6%

*Only available for cities with population over 5,000.

**City is located in multiple counties

Table 2
FY 2019 City Trade Pull Factors
Cities with >65% of County Trade

	FY 2019 State Sales Tax Collections	Adjusted Population CY 2018	Sales per Capita	Pull Factor	Income-Adjusted Pull Factor*	Trade Area Capture	Market Share	Percent of County Trade
Salina	$ 65,305,186	46,716	$ 1,397.92	1.47	1.62	68,516	2.4%	96.1%
Liberal	$ 21,316,875	19,495	$ 1,093.45	1.15	1.64	22,365	0.8%	94.1%
Lawrence	$ 100,852,440	97,286	$ 1,036.66	1.09	1.14	105,811	3.6%	93.5%
Goodland	$ 6,446,866	4,386	$ 1,469.87	1.54	n/a	6,764	0.2%	93.2%
Emporia	$ 27,132,749	24,765	$ 1,095.61	1.15	1.54	28,467	1.0%	92.8%
Dodge City	$ 29,412,973	27,329	$ 1,076.26	1.13	1.69	30,859	1.1%	91.7%
Manhattan^	$ 69,140,638	54,959	$ 1,258.04	1.32	1.45	72,540	2.5%	91.5%
Kansas City	$ 138,167,307	152,958	$ 903.30	0.95	1.41	144,960	5.0%	90.9%
Topeka	$ 161,417,963	124,819	$ 1,293.22	1.36	1.54	169,354	5.8%	90.8%
Atchison	$ 9,483,883	10,560	$ 898.10	0.94	1.14	9,950	0.3%	87.9%
Fort Scott	$ 8,511,184	7,765	$ 1,096.10	1.15	1.88	8,930	0.3%	87.6%
Garden City	$ 42,558,923	26,546	$ 1,603.21	1.68	2.19	44,651	1.5%	86.5%
Junction City	$ 22,088,870	22,120	$ 998.59	1.05	1.37	23,175	0.8%	85.3%
Hays	$ 33,438,320	20,852	$ 1,603.60	1.68	1.70	35,082	1.2%	84.5%
Pratt	$ 9,209,631	6,630	$ 1,389.08	1.46	1.78	9,662	0.3%	83.2%
Hutchinson	$ 46,126,452	38,764	$ 1,189.93	1.25	1.50	48,394	1.7%	83.1%
Concordia	$ 6,704,662	4,956	$ 1,352.84	1.42	1.72	7,034	0.2%	83.1%
Chanute	$ 10,574,046	9,018	$ 1,172.55	1.23	1.76	11,094	0.4%	82.9%
Scott City	$ 3,735,385	3,803	$ 982.22	1.03	n/a	3,919	0.1%	81.6%
Ottawa	$ 14,978,192	12,267	$ 1,221.02	1.28	1.68	15,715	0.5%	80.1%
Larned	$ 3,026,119	3,175	$ 953.11	1.00	n/a	3,175	0.1%	79.7%
Clay Center	$ 4,581,734	3,989	$ 1,148.59	1.21	n/a	4,807	0.2%	78.4%
Norton	$ 2,708,012	1,920	$ 1,410.42	1.48	n/a	2,841	0.1%	78.1%
Beloit	$ 4,470,427	3,726	$ 1,199.79	1.26	n/a	4,690	0.2%	77.4%
Great Bend	$ 21,346,261	15,170	$ 1,407.14	1.48	1.72	22,396	0.8%	76.2%
Colby	$ 11,396,640	5,317	$ 2,143.43	2.25	2.83	11,957	0.4%	76.2%
Syracuse	$ 1,337,336	1,749	$ 764.63	0.80	n/a	1,403	0.0%	76.1%
Holton	$ 5,594,016	3,248	$ 1,722.30	1.81	n/a	5,869	0.2%	75.3%
Parsons	$ 9,713,216	9,665	$ 1,004.99	1.05	1.48	10,191	0.4%	75.1%
Oberlin	$ 1,082,615	1,725	$ 627.60	0.66	n/a	1,136	0.0%	74.2%
Oakley^^	$ 2,686,030	2,108	$ 1,274.2	1.34	n/a	2,818	0.1%	74.1%
Wichita	$ 402,558,235	389,013	$ 1,034.82	1.09	1.21	422,350	14.6%	71.9%
Ulysses	$ 3,855,679	5,756	$ 669.85	0.70	0.79	4,045	0.1%	71.9%
Council Grove	$ 2,388,216	2,079	$ 1,148.73	1.21	n/a	2,506	0.1%	71.8%
Pittsburg	$ 21,801,761	20,178	$ 1,080.47	1.13	1.86	22,874	0.8%	71.3%
Wakeeney	$ 1,826,438	1,738	$ 1,050.88	1.10	n/a	1,916	0.1%	71.3%
Hugoton	$ 2,580,729	3,794	$ 680.21	0.71	n/a	2,708	0.1%	71.2%
Phillipsburg	$ 2,529,099	2,486	$ 1,017.34	1.07	n/a	2,653	0.1%	70.6%
Hill City	$ 1,419,673	1,415	$ 1,003.30	1.05	n/a	1,489	0.1%	69.2%
Smith Center	$ 1,674,203	1,581	$ 1,058.95	1.11	n/a	1,757	0.1%	68.1%
Iola	$ 8,212,775	5,312	$ 1,546.08	1.62	2.29	8,617	0.3%	67.2%
Newton	$ 15,990,830	18,746	$ 853.03	0.89	1.02	16,777	0.6%	66.9%
Leavenworth	$ 28,794,028	34,323	$ 838.91	0.88	0.99	30,210	1.0%	66.6%

*Only available for cities with population over 5,000.

^ Manhattan percent of county trade reflects the portion of the city in Riley County

^^ Oakley percent of county trade reflects the portion of the city in Logan County.