

# **A STUDY OF RETAIL TRADE IN CITIES ACROSS KANSAS**

## **AN ANNUAL REPORT OF TRADE PULL FACTORS AND TRADE AREA CAPTURES**

**Annual report for Fiscal Year 2013**

**Kansas Department of Revenue  
Office of Policy and Research  
Issued December 2013**

## INTRODUCTION

The City Trade Pull Factor report provides different measures of retail market data for selected cities. This report is the 23<sup>th</sup> annual report documenting city retail activity in Kansas' communities.

As published by Kansas State University the pull factor study reported on the first class cities of Kansas. The department expanded the report to include four groups of cities that many would consider to be regional centers for their communities. The cities are illustrated on Map 1. In addition to 1<sup>st</sup> class cities, the report also provides analysis for three other groups of cities that are not 1<sup>st</sup> class cities:

- cities with a population exceeding 10,000;
- cities generating 75% or more of their county's state sales tax collections; and
- cities generating 65-75% of the county's state sales tax collections.

The City Trade Pull Factor report provides different measures of retail market data for the cities for fiscal year 2013, which represents the period July 1, 2012 through June 30, 2013. Retail market data is presented three ways.

- The first measure is a location quotient of retail trade called the *City Trade Pull Factor (CiTPF)*. It is a measure of the relative strength of the retail business community. The City Trade Pull Factor is computed by dividing the per capita sales tax of a city by the statewide per capita sales tax. A CiTPF of 1.00 is a perfect balance of trade. The purchases of city residents who shop elsewhere are offset by the purchases of out-of-city customers. CiTPF values greater than 1.00 indicates that local businesses are pulling in trade from beyond their home city border. Thus, the balance of trade is favorable. 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 an unfavorable balance of trade.
- 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.
- The *Percent Market Share (MS)* is the percent the city's Trade Area Capture is of the state as a whole. TAC is calculated by dividing the city's TAC by the sum of all city TAC numbers.
- The *Percent of County Trade (PCT)* is a concentration factor that shows the percent capture of retail trade of the city within its county.

For historical data on this expanded list of cities, please refer to the prior reports. The fiscal year 2005 report contains data for fiscal years 2004 and 2003 in the appendixes.

Prior year reports and other community-related reports and can be found (or linked) at the Department of Revenue's web site, [www.ksrevenue.gov](http://www.ksrevenue.gov).

## DISCUSSION AND ANALYSIS

Map 1 provides a graphic view of the cities that are included in the study. The state is divided into the 11 regions used in the Governor’s Economic Development reporting. The inclusion of the additional groups of cities provides a greater overall view of where the retail activity is in the state and where it is concentrated. The 1<sup>st</sup> class cities are concentrated in eastern and central Kansas. By expanding the report to include three additional groups of cities, the report provides a more complete picture of retail activity across the state. These 57 cities account for 77% of all retail sales in the state and are home to 64.9% of the state’s population. In fiscal year 2012, there were also 57 cities included in this study, representing 82% of all retail sales.

There are 25 cities classified as first class cities in Kansas. These are historical designations, used to identify the larger, more dominant cities in their respective counties. These cities account for 65.8% of the state’s sales tax collections and 56.1% of the state’s population. Their combined CiTPF is 1.17, down from 1.25 in FY 2011.

Table 1, Group A lists the first class cities, their pull factors, trade area capture, and concentration factor. The 1<sup>st</sup> class city with the highest city trade pull factor (CiTPF) in FY 2013 is Lenexa with a factor of 1.49. Lenexa’s population in 2012 was 49,398. Garden City is close behind with a CiTPF of 1.51. Lenexa is an example of a city with a relatively low population base having a strong retail presence. Overland Park is 3rd, with a CiTPF of 1.47. Combined, these three communities account for over \$326 million of state sale tax collections or 13.2% of the statewide total. Lenexa and Overland Park, in Johnson County, account for most of the retail sales and reflects Johnson County’s dense population and above average purchasing power.

The 1<sup>st</sup> class city with the highest trade area capture (TAC) is Wichita. This business community serves an estimated 435,223 customers and far surpasses Overland Park’s TAC, calculated at 262,784 customers, due to the larger population base in Wichita. Wichita’s state tax collections represent 15% of the total collections in the state.

There are several 1<sup>st</sup> class cities that dominant their county’s retail trade and serve as regional retail centers. The following cities show a percentage of county sales exceeding 90%:

<u>City</u>	<u>% of County Sales</u>	<u>City</u>	<u>% of County Sales</u>
Salina	95.2%	Topeka	91.4%
Lawrence	92.9%	Emporia	91.4%
Liberal	92.4%		

Table 1, Group B lists cities that have populations exceeding 10,000 but are not 1<sup>st</sup> class cities. Twelve cities are included in this group and they have a wide variance in CiTPF. Merriam has a pull factor of 3.38 whereas Haysville’s pull factor is 0.25. Merriam’s location within Johnson County (Interstate 35 runs through the middle of the city) results in it having a much larger retail concentration and therefore a very high CiTPF even with

a low population total. The PCT also varies significantly among these cities, from a high of 78.9% for Hays to a low of 0.5% for Haysville. It shows that within this group of cities we have regional trade centers such as Hays and Great Bend and population bedroom communities, such as Gardner, Haysville and Derby.

Table 1, Group C are non-1<sup>st</sup> class cities with a population less than 10,000 but their concentration factor is 75% or more, meaning that they are the retail centers for their county. There are 9 cities within this group compared to 10 cities in FY 2012's report. The CiTPF ranges from 2.08 for Colby to 0.94 for Larned. All of these cities have pull factors greater than 1.0 with the exception of Larned, as would be expected being they are the retail centers for their home county.

Table 1, Group D consists of a group of 12 cities that also make out the majority of a county's sales tax. They are non-1<sup>st</sup> class cities with population less than 10,000 and PCT is between 65% and 75%. Many of these cities are the retail centers for their counties, several having pull factors near or greater than 1.0, indicating they are providing the retail needs for their residents. This group of cities shows the most change from year to year, as slight changes in collections and/or population can affect the city's PCT when it hovers near the 65% threshold.

## **CITY HISTORICAL ANALYSIS**

Pull factors since fiscal year 2009 were reviewed to determine if there are any trends that can be identified in terms of pull factor changes and in city rankings. Table 2 provides the pull factors for the last five years. There are several noticeable changes in pull factors for some 1st class cities.

Four (4) 1<sup>st</sup> class cities had increases of 5% or more in their pull factors since fiscal year 2009. They are Leawood, Garden City, Lawrence, and Kansas City. Cities experiencing the greatest decrease are Junction City (-18.4) and Overland Park (-9.3). The impact of destination sourcing has been reduced as it has been fully implemented throughout this 5-year period. The decreases in the pull factors can be attributed to the economic downturn being experienced throughout the nation. Junction City has had significant increases in both the sales tax collection and population; however the pull factor decreased as the population gains exceeded the gains in sales tax collections.

## **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. With the publication of the FY 2013 report, destination

sourcing has been in place for the entire study period and the effect is now longer as pronounced as it has been for the past several reports.

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. Prior to the new law, 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 population and state sales tax collections. City populations are from the U.S. Census Bureau as certified by the Division of the Budget July 1, 2013 and published as the official population reports for the state of Kansas, adjusted to remove the institutionalized population. The institutionalized population does not trade within the retail community, so should not impact the computing of the measures. People in prisons are part of the institutionalized population. To arrive at the adjusted population data for this report, state and federal prison populations were deducted from the city and county totals. This was a change beginning with the FY 2012 report. In the past, group quarter data from the US Census was subtracted from the population data. This would consist primarily of nursing home populations. A review of the data shows that deducting group quarter data has no impact on the pull factor and other statistics presented herein and therefore the decision was to only adjust prison population. The Census counts are published on their web site: [www.census.gov](http://www.census.gov).

State sales tax collections are generated by the Department of Revenue from sales tax returns filed by the state's retailers. The department has improved the data series used for this report. Sales tax reports issued by the department are available on the department's web site located at <http://www.ksrevenue.org>.

Table 1  
 City Trade Pull Factors, Trade Area Capture, Percent of County Sales  
 Fiscal Year 2013

	FY 13 Collections	FY 2013 Per Capita	Pull Factor	Trade Area Capture	Percent of County Share	Adjusted Population 2012 Cert 7/1/2013
<b>Group A, 1st class cities</b>						
Lenexa	\$ 67,327,319	\$ 1,363.0	1.59	78,592	11.0%	49,398
Garden City	\$ 34,337,191	\$ 1,272.5	1.49	40,082	82.3%	26,985
Overland Park	\$ 225,120,242	\$ 1,258.2	1.47	262,784	36.8%	178,919
Salina	\$ 59,518,838	\$ 1,238.8	1.45	69,477	95.2%	48,045
Leawood	\$ 39,704,993	\$ 1,220.2	1.42	46,348	6.5%	32,539
Topeka	\$ 145,319,385	\$ 1,142.3	1.33	169,632	91.4%	127,217
Hutchinson	\$ 44,875,181	\$ 1,117.9	1.30	52,383	82.4%	40,142
Liberal	\$ 22,259,769	\$ 1,055.8	1.23	25,984	92.4%	21,084
Dodge City	\$ 28,594,404	\$ 1,018.5	1.19	33,378	88.7%	28,075
Fort Scott	\$ 7,976,780	\$ 1,005.4	1.17	9,311	88.5%	7,934
Olathe	\$ 130,649,242	\$ 1,004.6	1.17	152,508	21.4%	130,045
Wichita	\$ 372,843,844	\$ 967.0	1.13	435,223	76.3%	385,577
Pittsburg	\$ 19,246,023	\$ 945.3	1.10	22,466	75.0%	20,360
Lawrence	\$ 81,747,115	\$ 913.3	1.07	95,424	92.9%	89,512
Coffeyville	\$ 9,078,536	\$ 908.5	1.06	10,597	38.0%	9,993
Emporia	\$ 22,581,306	\$ 904.8	1.06	26,359	91.4%	24,958
Parsons	\$ 9,104,039	\$ 881.6	1.03	10,627	74.8%	10,327
Junction City	\$ 22,106,926	\$ 856.3	1.00	25,806	84.0%	25,817
Manhattan	\$ 62,960,434	\$ 1,122.9	1.31	73,494	62.0%	56,069
Shawnee	\$ 50,488,407	\$ 793.6	0.93	58,935	8.3%	63,622
Kansas City	\$ 112,559,981	\$ 764.3	0.89	131,392	89.3%	147,268
Newton	\$ 14,426,366	\$ 751.8	0.88	16,840	65.5%	19,189
Atchison	\$ 8,086,830	\$ 738.3	0.86	9,440	88.4%	10,953
Leavenworth	\$ 22,840,508	\$ 637.7	0.74	26,662	67.7%	35,816
Prairie Village	\$ 12,165,305	\$ 558.8	0.65	14,201	2.0%	21,769
Total, Group A	\$ 1,625,918,965	\$ 1,008.9	1.17	1,892,173		1,611,613
% of Statewide	65.8%			65.8%		56.1%
Statewide Total	\$ 2,469,345,874	\$ 859.3	1.00	2,873,716		2,873,716

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 Fiscal Year 2013

	FY 13 Collections	FY 2013 Per Capita	Pull Factor	Trade Area Capture	Percent of County Share	Adjusted Population 2012 Cert 7/1/2013
<b>Group B, Not 1st Class Cities - population exceeds 10,000</b>						
Merriam	\$ 32,378,650	\$ 2,897.7	3.38	37,796	5.3%	11,174
Hays	\$ 33,308,867	\$ 1,586.7	1.85	38,882	78.9%	20,993
Great Bend	\$ 21,912,895	\$ 1,376.2	1.61	25,579	71.1%	15,923
McPherson	\$ 16,186,812	\$ 1,224.6	1.43	18,895	66.0%	13,218
El Dorado	\$ 12,701,626	\$ 1,119.9	1.31	14,827	32.3%	11,342
Derby	\$ 22,803,180	\$ 993.9	1.16	26,618	4.7%	22,943
Ottawa	\$ 11,888,346	\$ 945.4	1.10	13,877	74.7%	12,575
Andover	\$ 9,676,556	\$ 799.8	0.93	11,296	24.6%	12,099
Winfield	\$ 9,210,060	\$ 796.1	0.93	10,751	44.0%	11,569
Arkansas City	\$ 9,062,722	\$ 734.4	0.86	10,579	43.3%	12,340
Gardner	\$ 10,849,298	\$ 534.0	0.62	12,664	1.8%	20,318
Haysville	\$ 2,307,123	\$ 210.7	0.25	2,693	0.5%	10,951
Total, Group B	\$ 192,286,137	\$ 1,096.0	1.08	188,992		175,445
% of Statewide	7.8%			10.0%		6.1%
Subtotal, Groups A, B	\$ 1,818,205,102	\$ 1,017.4	1.18	2,081,165		\$ 1,787,058
% of Statewide	73.6%			72.4%		62.2%
<b>Group C, Not 1st Class Cities - sales tax collections make up 75% or more of total county sales tax</b>						
Pratt	\$ 9,445,205	\$ 1,372.8	1.60	11,025	83.1%	6,880
Colby	\$ 9,615,834	\$ 1,778.7	2.08	11,225	86.7%	5,406
Concordia	\$ 6,590,531	\$ 1,238.8	1.45	7,693	82.1%	5,320
Goodland	\$ 5,500,203	\$ 1,206.4	1.41	6,420	82.1%	4,559
Chanute	\$ 9,883,335	\$ 1,078.8	1.26	11,537	79.6%	9,161
Beloit	\$ 4,362,148	\$ 1,138.9	1.33	5,092	78.4%	3,830
Clay Center	\$ 4,093,225	\$ 948.6	1.11	4,778	79.2%	4,315
Larned	\$ 2,902,851	\$ 809.0	0.94	3,389	75.7%	3,588
Norton	\$ 2,841,776	\$ 1,388.9	1.62	3,317	77.3%	2,046
Total, Group C	\$ 55,235,109	\$ 1,224.6	1.20	54,018		45,105
% of Statewide	3.0%			2.6%		2.5%
Subtotal, Groups A, B, C	\$ 1,873,440,211	\$ 1,022.5	1.19	2,135,183		1,832,163
% of Statewide	75.9%			74.3%		63.8%







Table 2  
 Historical Pull Factors  
 FY 2009 through FY 2013

<u>Fiscal Year 2009</u>			<u>Fiscal Year 2013</u>		
City Name	Pull Factor	Rank	City Name	Pull Factor	Rank
<b>Group A, 1st class cities</b>					
Overland Park	1.62	1	Lenexa	1.59	1
Lenexa	1.60	2	Garden City	1.49	2
Salina	1.48	3	Overland Park	1.47	3
Topeka	1.43	4	Salina	1.45	4
Hutchinson	1.35	5	Leawood	1.42	5
Garden City	1.33	6	Topeka	1.33	6
Manhattan	1.29	7	Manhattan (pt.)	1.31	7
Leawood	1.26	8	Hutchinson	1.30	8
Liberal	1.24	9	Liberal	1.23	9
Junction City	1.22	10	Dodge City	1.19	10
Wichita	1.20	11	Fort Scott	1.17	11
Dodge City	1.16	12	Olathe	1.17	12
Pittsburg	1.15	13	Wichita	1.13	13
Olathe	1.15	14	Pittsburg	1.10	14
Fort Scott	1.14	15	Lawrence	1.07	15
Coffeyville	1.04	16	Coffeyville	1.06	16
Parsons	1.04	17	Emporia	1.06	17
Emporia	1.02	18	Parsons	1.03	18
Lawrence	0.99	19	Junction City	1.00	19
Newton	0.96	20	Shawnee	0.93	20
Atchison	0.95	21	Kansas City	0.89	21
Shawnee	0.94	22	Newton	0.88	22
Kansas City	0.85	23	Atchison	0.86	23
Leavenworth	0.78	24	Leavenworth	0.74	24
Prairie Village	0.63	25	Prairie Village	0.65	25

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Historical Pull Factors  
FY 2009 through FY 2013

<u>Fiscal Year 2009</u>			<u>Fiscal Year 2013</u>		
City Name	Pull Factor	Rank	City Name	Pull Factor	Rank
<b>Group B, Not 1st Class Cities - population exceeds 10,000</b>					
Merriam	3.08	1	Merriam	3.38	1
Hays	1.73	2	Hays	1.85	2
Great Bend	1.61	3	Great Bend	1.61	3
McPherson	1.30	4	McPherson	1.43	4
El Dorado	1.29	5	El Dorado	1.31	5
Derby	1.14	6	Derby	1.16	6
Ottawa	1.08	7	Ottawa	1.10	7
Winfield	1.02	8	Winfield	0.93	9
Arkansas City	0.98	9	Andover	0.93	8
Gardner	0.64	10	Arkansas City	0.86	10
			Gardner	0.62	11
			Haysville	0.25	12
<b>Group C, Not 1st Class Cities - sales tax collections make up 75% or more of total county sales tax</b>					
Colby	2.10	1	Pratt	1.60	1
Pratt	1.73	2	Colby	2.08	2
Concordia	1.57	3	Concordia	1.45	3
Chanute	1.37	4	Goodland	1.41	4
Beloit	1.36	5	Chanute	1.26	5
Goodland	1.34	6	Beloit	1.33	6
Clay Center	1.11	7	Clay Center	1.11	7
Larned	1.02	8	Larned	0.94	8
			Norton	1.62	9
<b>Group D, Not 1st Class Cities - sales tax collections make up 65-75% of total county sales tax</b>					
Holton	1.62	1	Ulysses	0.88	1
Iola	1.37	2	Syracuse	0.77	2
WaKeeney	1.27	3	Iola	1.42	3
Phillipsburg	1.25	4	Holton	1.51	4
Norton	1.14	5	Council Grove	1.13	5
Smith Center	1.13	6	Oakley	1.14	6
Council Grove	1.07	7	Wakeeney	1.17	7
Ulysses	1.03	8	Garnett	1.00	8
Garnett	1.01	9	Scott City	1.00	9
Scott City	1.00	10	Phillipsburg	1.15	10
Oberlin	0.71	11	Oberlin	0.60	11
Syracuse	0.67	12	Marysville	1.78	12