

# **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 2012**

**Kansas Department of Revenue  
Office of Policy and Research  
Issued December 2012**

## INTRODUCTION

The City Trade Pull Factor report provides different measures of retail market data for selected cities. This report is the 22<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 2012, which represents the period July 1, 2011 through June 30, 2012. 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 82% of all retail sales in the state and are home to 64.1% of the state’s population. In fiscal year 2011, there were 60 cities included in this study, representing 77.9% 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 69.9% of the state’s sales tax collections and 56.1% of the state’s population. Their combined CiTPF is 1.25, up slightly from 1.19 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 2012 is Lenexa with a factor of 1.52. Lenexa’s population in 2011 was 48,972. Overland Park 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. Combined, these two communities account for over \$285 million of state sale tax collections or 12.5% of the statewide total. This high amount of retail sales is due to 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 427,384 customers and far surpasses Overland Park’s TAC, calculated at 265,554 customers, due to the larger population base in Wichita. Wichita’s state tax collections represent 16% 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	95.4%	Topeka	91.5%
Lawrence	93.0%	Emporia	90.1%
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 3.16 whereas Haysville’s pull factor is 0.24. 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 79.5% 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 2011's report. The CiTPF ranges from 2.09 for Colby to 0.82 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. The city that dropped out of this group in FY 2012 is Ulysses, which is in Group D.

Table 1, Group D consists of a group of 11 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 2008 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.

Six (6) 1<sup>st</sup> class cities had increases of 5% or more in their pull factors since fiscal year 2008. They are Leawood, Manhattan, Garden City, Dodge City, Lawrence, and Kansas City. Cities experiencing the greatest decrease are Junction City (-27.5) and Lenexa (-10.4). 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 is unique due to the impact of Fort Riley. There has been a significant increase in both the sales tax collection and population; however the pull factor decreased from 1.55 to 1.24 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 2012 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. Cities near a population center are experiencing a greater increase in sales tax collections, which may be a combination of the effects of destination sourcing and new retail stores due to the out migration of the population from population centers to bedroom communities.

## **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, 2012 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 is a change for 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  
FY 2012

City	FY 2012 Collections	FY 2012 Per Capita	Pull Factor	Trade Area Capture	Percent of County Sales	(certified 7/2012) 2011 Population less Institutionalized
<b>Group A, 1st Class Cities</b>						
Lenexa	\$ 62,503,635	\$ 1,276.3	1.52	74,383	10.51%	48,972
Overland Park	\$ 223,142,796	\$ 1,266.5	1.51	265,554	37.53%	176,185
Salina	\$ 59,045,502	\$ 1,232.4	1.47	70,268	95.37%	47,910
Garden City	\$ 33,127,021	\$ 1,232.4	1.47	39,423	82.32%	26,880
Manhattan	\$ 63,338,126	\$ 1,180.0	1.40	75,376	88.50%	53,678
Leawood	\$ 38,161,727	\$ 1,178.2	1.40	45,415	6.42%	32,389
Topeka	\$ 147,772,833	\$ 1,152.8	1.37	175,859	91.53%	128,188
Hutchinson	\$ 44,877,710	\$ 1,064.9	1.27	53,407	83.22%	42,142
Liberal	\$ 21,644,580	\$ 1,037.6	1.23	25,758	92.37%	20,861
Dodge City	\$ 28,522,304	\$ 1,021.5	1.22	33,943	89.70%	27,921
Olathe	\$ 126,585,951	\$ 989.7	1.18	150,645	21.29%	127,907
Pittsburg	\$ 19,204,084	\$ 947.1	1.13	22,854	75.50%	20,276
Junction City	\$ 22,682,221	\$ 944.5	1.12	26,993	84.73%	24,015
Wichita	\$ 359,127,607	\$ 934.1	1.11	427,384	75.70%	384,445
Fort Scott	\$ 7,328,765	\$ 917.2	1.09	8,722	87.92%	7,990
Coffeyville	\$ 9,184,314	\$ 906.0	1.08	10,930	37.79%	10,137
Emporia	\$ 22,560,527	\$ 903.5	1.08	26,848	90.07%	24,971
Lawrence	\$ 79,524,295	\$ 896.3	1.07	94,639	92.96%	88,727
Parsons	\$ 9,188,136	\$ 878.9	1.05	10,934	74.87%	10,454
Shawnee	\$ 49,442,785	\$ 782.1	0.93	58,840	8.32%	63,219
Atchison	\$ 8,184,360	\$ 747.9	0.89	9,740	87.98%	10,943
Kansas City	\$ 108,761,278	\$ 742.6	0.88	129,433	88.77%	146,453
Newton	\$ 14,060,029	\$ 731.2	0.87	16,732	64.50%	19,230
Leavenworth	\$ 22,027,577	\$ 617.5	0.73	26,214	67.56%	35,675
Prairie Village	\$ 11,799,501	\$ 541.4	0.64	14,042	1.98%	21,795
Total, Group A	\$ 1,591,797,664	\$ 994	1.25	\$ 1,993,702		1,601,363
% of Statewide	69.9%			69.9%		56.1%
Statewide Total	\$ 2,277,967,023	\$ 798.41	1.00	\$ 2,853,118		2,853,118

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City	FY 2012 Collections	FY 2012 Per Capita	Pull Factor	Trade Area Capture	Percent of County Sales	(certified 7/2012) 2011 Population less Institutionalized
<b>Group B, Not 1st Class Cities - population exceeds 10,000</b>						
Merriam	\$ 29,688,200	\$ 2,655.5	3.16	35,331	4.99%	11,180
Hays	\$ 33,186,179	\$ 1,601.9	1.91	39,494	79.51%	20,717
Great Bend	\$ 22,006,607	\$ 1,367.5	1.63	26,189	72.07%	16,092
McPherson	\$ 15,514,263	\$ 1,176.9	1.40	2,437	64.2%	13,182
El Dorado	\$ 12,536,626	\$ 1,073.6	1.28	14,919	32.78%	11,677
Derby	\$ 22,826,530	\$ 1,024.6	1.22	27,165	4.81%	22,279
Ottawa	\$ 11,673,902	\$ 925.0	1.10	13,893	74.13%	12,620
Winfield	\$ 9,600,720	\$ 836.1	0.99	11,425	43.54%	11,483
Andover	\$ 9,200,772	\$ 781.1	0.93	10,949	24.06%	11,779
Arkansas City	\$ 9,348,953	\$ 753.9	0.90	11,126	42.40%	12,401
Gardner	\$ 10,297,861	\$ 529.9	0.63	12,255	1.73%	19,433
Haysville	\$ 2,192,959	\$ 201.5	0.24	2,610	0.46%	10,883
Total, Group B	\$ 188,073,572	\$ 1,083	1.36	\$ 235,559		173,726
% of Statewide	7.5%			8%		6%
Sub-total, Groups A, B	\$ 1,779,871,236	\$ 1,003	1.26	\$ 2,229,261		1,775,089
% of Statewide	78.1%			78.1%		62%
<b>Group C, Not 1st Class Cities - sales tax collections make up 75% or more of the total county sales tax.</b>						
Pratt	\$ 9,065,538	\$ 1,323.4	1.57	10,789	86.69%	6,850
Colby	\$ 9,544,145	\$ 1,755.1	2.09	11,358	86.48%	5,438
Concordia	\$ 6,531,504	\$ 1,231.9	1.47	7,773	82.43%	5,302
Goodland	\$ 5,497,351	\$ 1,215.7	1.45	6,542	80.43%	4,522
Chanute	\$ 9,733,500	\$ 1,071.4	1.28	11,583	80.10%	9,085
Beloit	\$ 4,285,792	\$ 1,131.1	1.35	5,100	78.96%	3,789
Clay Center	\$ 4,066,519	\$ 934.0	1.11	4,839	78.88%	4,354
Larned	\$ 2,804,023	\$ 687.3	0.82	3,337	76.87%	4,080
Norton	\$ 2,744,794	\$ 943.9	1.12	3,266	76.05%	2,908
Total, Group C	\$ 54,273,166	\$ 1,171	1.47	\$ 67,976		46,328
% of Statewide	2.4%			2.4%		1.6%
Subtotal, Groups A, B, C	\$ 1,834,144,402	\$ 1,007	1.26	\$ 2,297,237		1,821,417
% of Statewide	80.5%			80.5%		63.8%

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City Trade Pull Factors, Trade Area Capture, Percent of County Sales  
FY 2012

City	FY 2012 Collections	FY 2012 Per Capita	Pull Factor	Trade Area Capture	Percent of County Sales	(certified 7/2012) 2011 Population less Institutionalized
<b>Group D, Not 1st Class Cities - sales tax collections make up 65-75% of the total county sales tax.</b>						
Ulysses	\$ 4,558,221	\$ 727.3	0.87	5,425	74.91%	6,267
Syracuse	\$ 1,136,103	\$ 633.3	0.75	1,352	73.17%	1,794
Iola	\$ 6,963,364	\$ 1,224.4	1.46	8,287	72.96%	5,687
Holton	\$ 4,249,907	\$ 1,279.3	1.52	5,058	72.93%	3,322
Council Grove	\$ 2,070,761	\$ 954.7	1.14	2,464	72.01%	2,169
Oakley	\$ 2,779,608	\$ 1,345.4	1.60	3,308	71.80%	2,066
WaKeeney	\$ 1,838,299	\$ 1,011.2	1.20	2,188	71.46%	1,818
Garnett	\$ 2,980,990	\$ 876.2	1.04	3,548	71.03%	3,402
Scott City	\$ 3,245,852	\$ 855.1	1.02	3,863	70.99%	3,796
Phillipsburg	\$ 2,523,946	\$ 992.9	1.18	3,004	68.19%	2,542
Oberlin	\$ 866,452	\$ 492.3	0.59	1,031	65.25%	1,760
Total, Group D	\$ 33,213,504	\$ 959	1.20	\$ 41,599		34,623
% of Statewide	1.5%			1.5%		1.2%
Subtotal, Groups A, B, C, D	\$ 1,867,357,906	\$ 1,006	1.26	\$ 2,338,837		1,856,040
% of Statewide	82.0%			82.0%		65.1%

Table 2  
 Historical Pull Factors  
 FY 2008 through FY 2012

City Name	<u>Fiscal Year 2008</u>		City Name	<u>Fiscal Year 2012</u>		% change
	Pull Factor	Rank		Pull Factor	Rank	
Lenexa	1.69	1	Lenexa	1.519	1	-10.4%
Overland Park	1.62	2	Overland Park	1.507	2	-7.1%
Junction City	1.55	3	Junction City	1.124	13	-27.5%
Topeka	1.44	4	Topeka	1.372	7	-4.9%
Salina	1.44	5	Salina	1.467	3	2.2%
Hutchinson	1.36	6	Hutchinson	1.267	8	-6.5%
Garden City	1.31	7	Garden City	1.467	4	12.2%
Liberal	1.28	8	Liberal	1.235	9	-3.3%
Manhattan	1.25	9	Manhattan	1.404	5	11.9%
Leawood	1.23	10	Leawood	1.402	6	14.4%
Olathe	1.21	11	Olathe	1.178	11	-3.0%
Wichita	1.20	12	Wichita	1.112	14	-7.1%
Dodge City	1.14	13	Dodge City	1.216	10	6.8%
Pittsburg	1.12	14	Pittsburg	1.127	12	0.3%
Fort Scott	1.11	15	Fort Scott	1.092	15	-1.3%
Coffeyville	1.04	16	Coffeyville	1.078	16	3.5%
Emporia	1.04	17	Emporia	1.075	17	3.7%
Parsons	1.03	18	Parsons	1.046	19	1.4%
Lawrence	0.99	19	Lawrence	1.067	18	7.6%
Shawnee	0.98	20	Shawnee	0.931	20	-5.4%
Atchison	0.98	21	Atchison	0.890	21	-9.2%
Newton	0.96	22	Newton	0.870	23	-9.2%
Kansas City	0.84	23	Kansas City	0.884	22	5.3%
Leavenworth	0.77	24	Leavenworth	0.735	24	-4.0%
Prairie Village	0.64	25	Prairie Village	0.644	25	1.3%

Table 2  
 Historical Pull Factors  
 FY 2008 through FY 2012

City Name	Fiscal Year 2008		City Name	Fiscal Year 2012		% change
	Pull Factor	Rank		Pull Factor	Rank	
Merriam	3.40	1	Merriam	3.160	1	-6.9%
Hays	1.72	2	Hays	1.906	2	10.9%
Great Bend	1.56	3	Great Bend	1.627	3	4.0%
El Dorado	1.28	4	El Dorado	1.278	5	0.1%
McPherson	1.23	5	McPherson	1.401	4	13.9%
Ottawa	1.12	6	Ottawa	1.101	7	-1.5%
Winfield	1.02	7	Winfield	0.995	8	-2.9%
Derby	1.02	8	Derby	1.219	6	19.3%
Arkansas City	0.94	9	Arkansas City	0.897	10	-4.7%
Gardner	0.68	10	Gardner	0.631	11	-7.5%
			Andover	0.930	9	
			Haysville	0.240	12	
Colby	2.06	1	Colby	2.089	1	1.3%
Pratt	1.69	2	Pratt	1.575	2	-6.8%
Chanute	1.47	3	Chanute	1.275	6	-13.5%
Concordia	1.47	4	Concordia	1.466	3	-0.5%
Goodland	1.34	5	Goodland	1.447	4	7.7%
Beloit	1.28	6	Beloit	1.346	5	4.8%
WaKeeney	1.22	7				
Clay Center	1.10	8	Clay Center	1.111	8	1.3%
Norton	1.05	9	Norton	1.123	7	6.7%
Larned	0.96	10	Larned	0.818	9	-14.7%

Table 2  
 Historical Pull Factors  
 FY 2008 through FY 2012

City Name	<u>Fiscal Year 2008</u>		City Name	<u>Fiscal Year 2012</u>		% change
	Pull Factor	Rank		Pull Factor	Rank	
Holton	1.74	1	Holton	1.522	2	-12.5%
Phillipsburg	1.23	2	Phillipsburg	1.182	5	-4.0%
Syracuse	1.22	3	Syracuse	0.754	10	-38.1%
Iola	1.11	4	Iola	1.457	3	30.7%
Oberlin	1.10	5	Oberlin	0.586	11	-46.5%
Garnett	1.02	6				
Marysville	0.97	7				
Scott City	0.91	8	Scott City	1.018	8	12.0%
Council Grove	0.91	9	Council Grove	1.136	6	25.4%
Smith Center	0.74	10				
Ulysses	0.69	11	Ulysses	0.866	9	25.9%
			Oakley	1.601	1	
			WaKeeney	1.203	4	
			Garnett	1.043	7	
			Scott City	1.018	8	